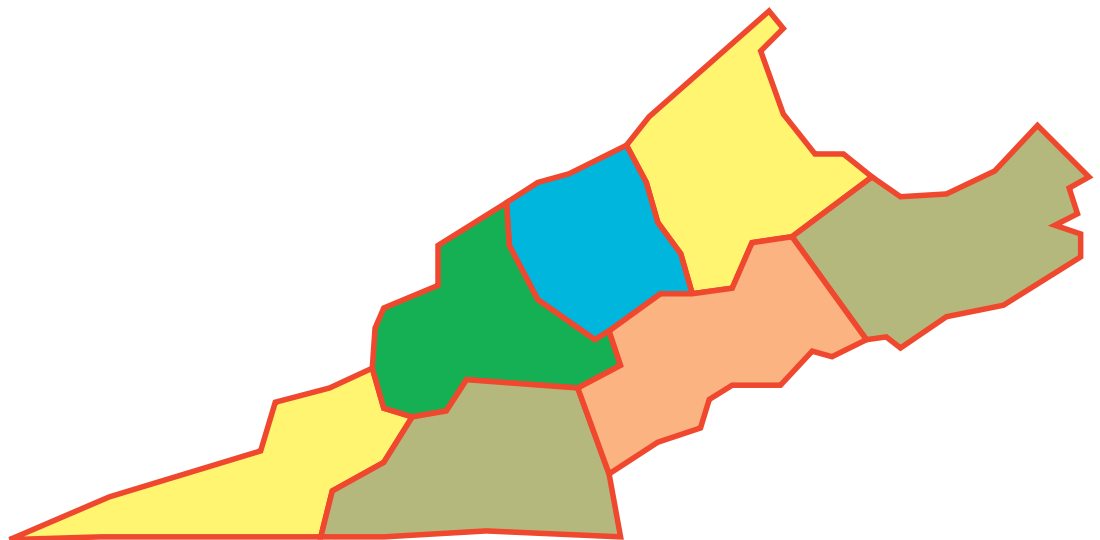
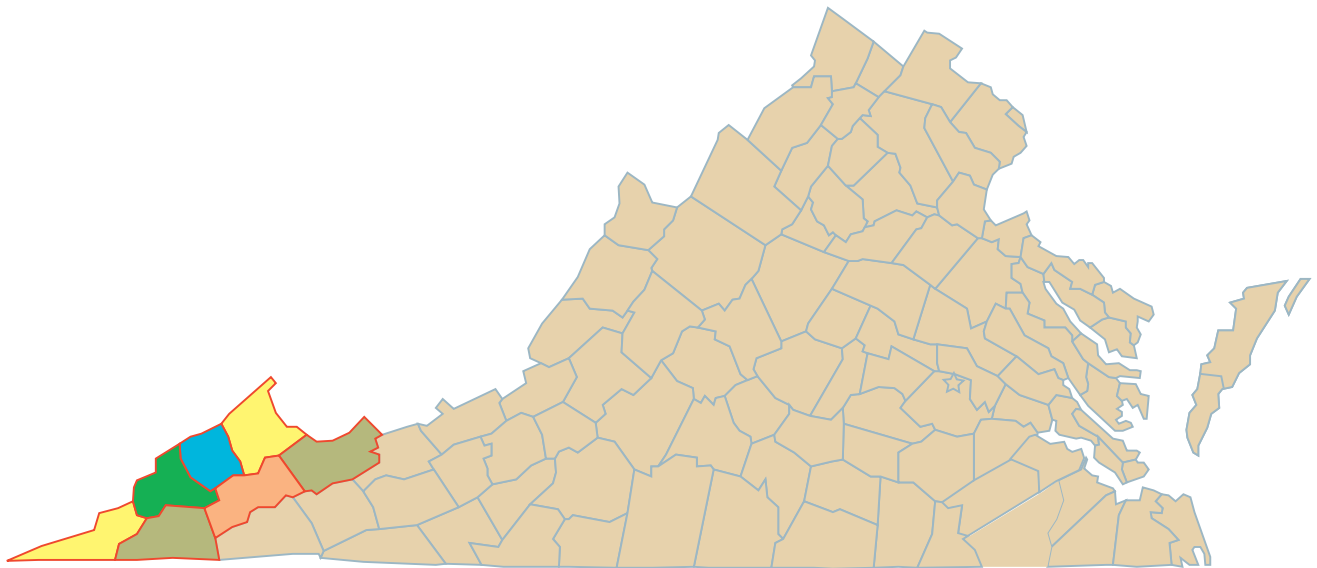
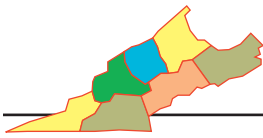


# Community Profile of WIA I

Buchanan County • Dickenson County • Lee County • Russell County • Scott County •  
Tazewell County • Wise County • City of Norton





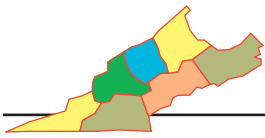


## Contents

<b>Executive Summary . . . . .</b>	<b>iii</b>
<b>I. Introduction . . . . .</b>	<b>1</b>
<b>II. Demographic Profile. . . . .</b>	<b>3</b>
Population by Age Cohort . . . . .	4
Population by Race/Ethnicity. . . . .	5
Population Change. . . . .	6
Population Projections by Age Cohort . . . . .	7
English Language Skills . . . . .	8
Commuting Patterns . . . . .	9
<b>III. Economic Profile . . . . .</b>	<b>11</b>
Unemployment Rate Trends . . . . .	12
Employers by Size of Establishment . . . . .	13
Employment by Size of Establishment . . . . .	13
Employment by Industry . . . . .	14
New Hires by Industry . . . . .	15
Turnover by Industry . . . . .	16
Average Weekly Wage by Industry. . . . .	17
Age of Workers by Industry . . . . .	18
Total Employment by Industry. . . . .	19
Employment by Major Occupation Group . . . . .	19
Growth Occupations . . . . .	20
Declining Occupations . . . . .	20
Characteristics of the Unemployed . . . . .	21



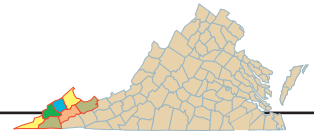
<b>IV. Education Profile . . . . .</b>	<b>.23</b>
Education Level . . . . .	24
Occupation-Driven Training Projection . . . . .	25
Annual Occupation-Driven Training Needs in the Southwest Virginia Region, 1998 - 2008 . . . . .	26
Work Skills Projection. . . . .	33
Graduate Data . . . . .	42
WIA I Training Providers List . . . . .	45
 <b>V. Summary and Conclusion . . . . .</b>	 <b>.47</b>
 <b>Appendix. . . . .</b>	 <b>.48</b>
Average Weekly Wage. . . . .	48
Unemployment Rate Trends . . . . .	52
Population by Age . . . . .	53
Employment by Industry . . . . .	55

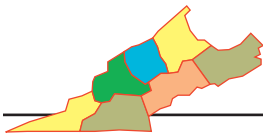


### Executive Summary

This report provides a demographic, economic, and educational profile of Workforce Investment Area I, Southwest Virginia. The purpose of these profiles is to assist on-going strategic planning efforts by providing a solid, data-driven, foundation for strategic decision-making. The primary findings from these profiles are:

- Between 2000 and 2010, WIA I will experience declining population, coupled with a major increase in the proportion of its population that is 55 and over. The net result of these trends will be a significant “graying” of the overall population.
- One implication of this trend is that younger entry-level workers will be in short supply.
- WIA I is experiencing, and will likely continue to experience, increased employment in Services and Retail Trade.
- One implication of this is that the Service sector – specifically, health care and education – is expected to account for much of the demand for trained workers between 1998 and 2008.

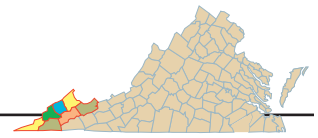


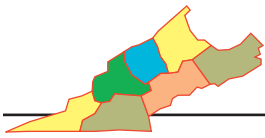


### I. Introduction

This report provides a community profile of Workforce Investment Area I (WIA I). It was produced by the Virginia Employment Commission, with assistance from the Virginia Community College System and the Virginia Economic Development Partnership, at the request of the Special Advisor to the Governor for Workforce Development. It is intended to assist on-going strategic planning efforts within the Workforce Investment Boards by providing a solid, data-driven, foundation for strategic decision-making.

The report is divided into four major sections. The first contains a profile of regional demographic characteristics and trends, the second supplies similar information for the regional economy, and the third provides a profile of regional education characteristics and projected demands for training and skills. These are followed by a summary and conclusion section.

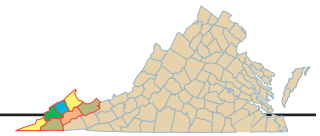




## II. Demographic Profile

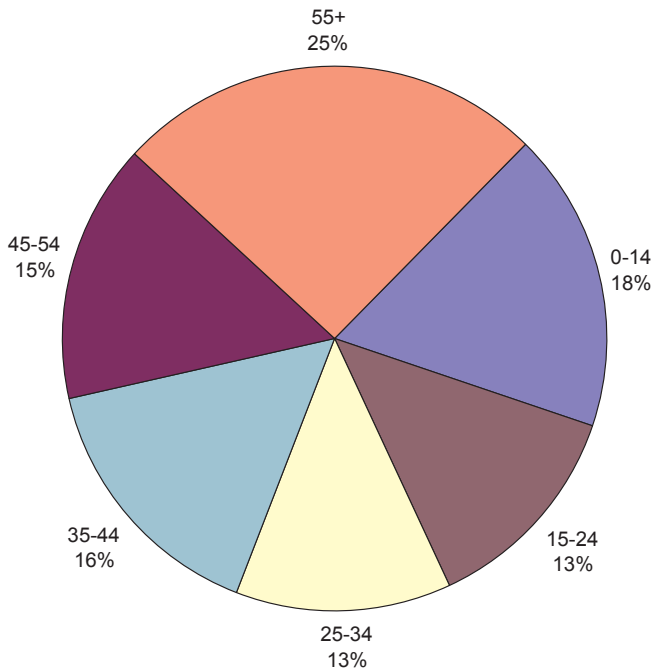
Population demographics are the single most important factor affecting WIA I's future labor force. Some key features of the area's population are as follows:

- Tends to be slightly older. Where statewide individuals who are 55 and older comprise 20 percent of the population, in WIA I they comprise 25 percent of the population.
- Has a smaller minority population. Where statewide minorities comprise 28 percent of the overall population, in WIA I they comprise three percent of the population.
- Is projected to decline by 6,934 persons (or 3.3 percent) between 2000 and 2010. The largest decrease is expected to occur in Buchanan County (2,578), followed by Tazewell (1,998), and Wise (1,209). Only Russell County is projected to experience an increase in population during the period (942 persons).
- Has a smaller proportion of individuals who "speak English less than well". Where statewide the proportion of individuals five and older who speak English less than well is 2.2 percent, in WIA I it is only 0.2 percent.
- Wise County draws the largest number of in-commuters (4,662) of any locality within WIA I, followed by the city of Norton (4,445). Most of these in-commuters come from within WIA I. Tazewell County draws the largest number of in-commuters from out-of-state (2,086). On the whole, WIA I is a net exporter of workers with 7,173 individuals commuting into the area for work while 14,665 of the area's residents commute to localities outside of WIA I for work.

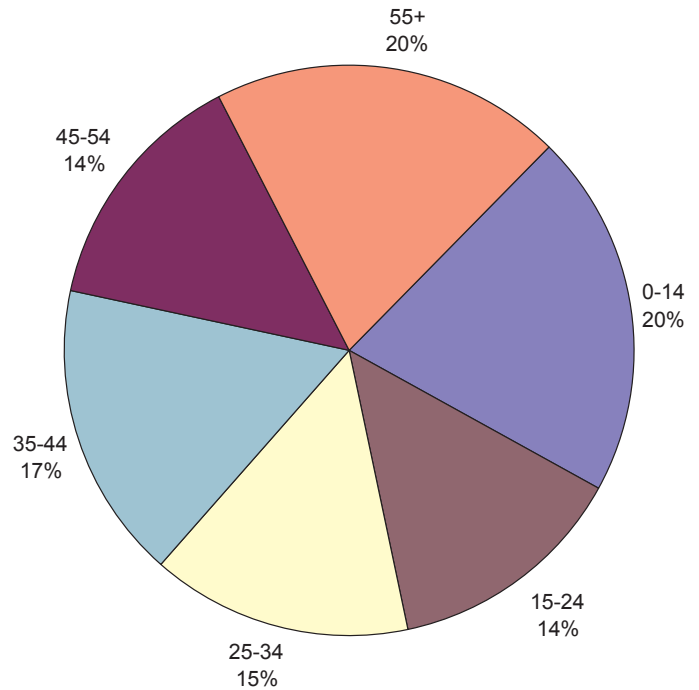


## Population by Age Cohort

**WIA I**



**Virginia**



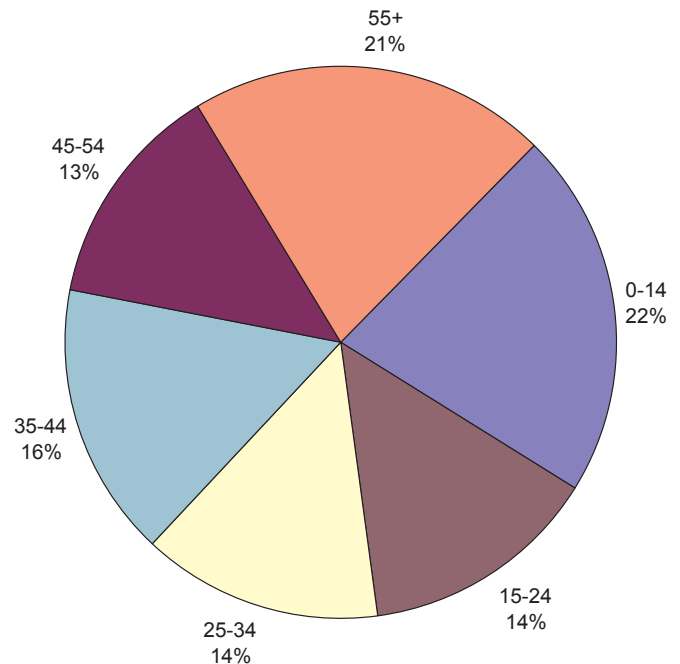
**WIA I**

0-14	37,162
15-24	27,105
25-34	27,110
35-44	32,762
45-54	32,355
55+	53,840
<b>Total</b>	<b>210,334</b>

**Virginia**

0-14	1,453,452
15-24	963,469
25-34	1,036,911
35-44	1,200,950
45-54	999,548
55+	1,424,169
<b>Total</b>	<b>7,078,494</b>

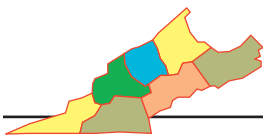
**United States**



**United States**

0-14	60,253,375
15-24	39,183,890
25-34	39,891,724
35-44	45,148,527
45-54	37,677,952
55+	59,266,437
<b>Total</b>	<b>281,421,906</b>

Subparts may not add to total due to rounding.  
Source: 2000 Census.

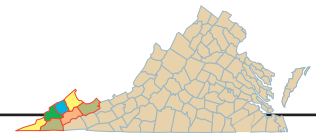


### Population by Race/Ethnicity

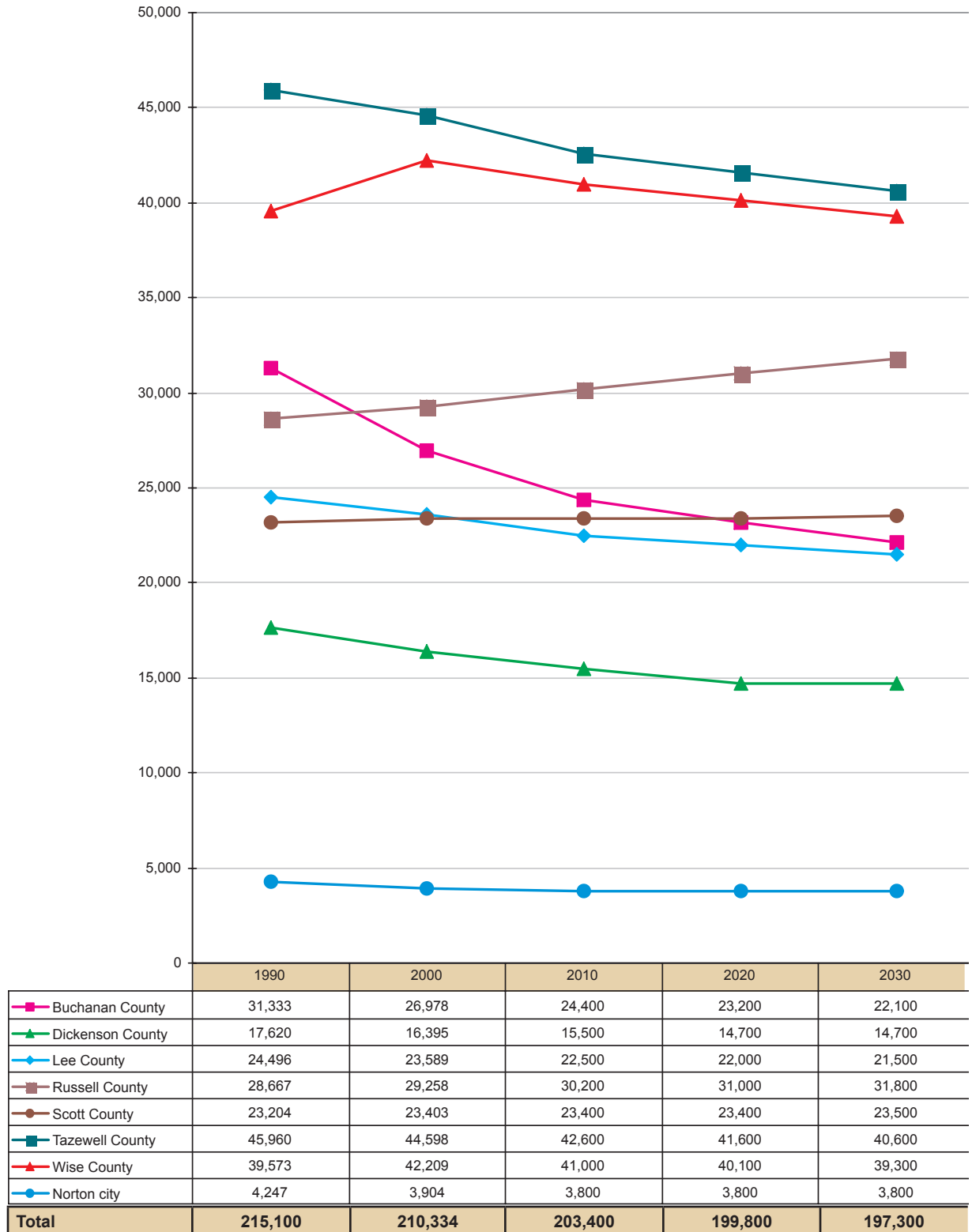
WIA VXi		
Total Population	209,298	100.0%
Race		
White	203,050	97.0%
Black or African American	3,915	1.9%
American Indian and Alaska Native	295	0.1%
Asian	555	0.3%
Native Hawaiian and Other Pacific Islander	16	—
Other and Multi-Race	1,467	0.7%
Ethnicity		
Hispanic or Latino (of any race)	1,208	0.6%

Virginia		
Total Population	7,078,515	100.0%
Race		
White	5,120,110	72.3%
Black or African American	1,390,293	19.6%
American Indian and Alaska Native	21,172	0.3%
Asian	261,025	3.7%
Native Hawaiian and Other Pacific Islander	3,946	0.1%
Other and Multi-Race	281,969	4.0%
Ethnicity		
Hispanic or Latino (of any race)	329,540	4.7%

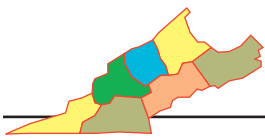
United States		
Total population	281,421,906	100.0%
Race		
One race	274,595,678	97.6%
White	211,460,626	75.1%
Black or African American	34,658,190	12.3%
American Indian and Alaska Native	2,475,956	0.9%
Asian	10,242,998	3.6%
Native Hawaiian and Other Pacific Islander	398,835	0.1%
Other and Multi-Race	22,185,301	7.9%
Ethnicity		
Hispanic or Latino (of any race)	35,305,818	12.5%



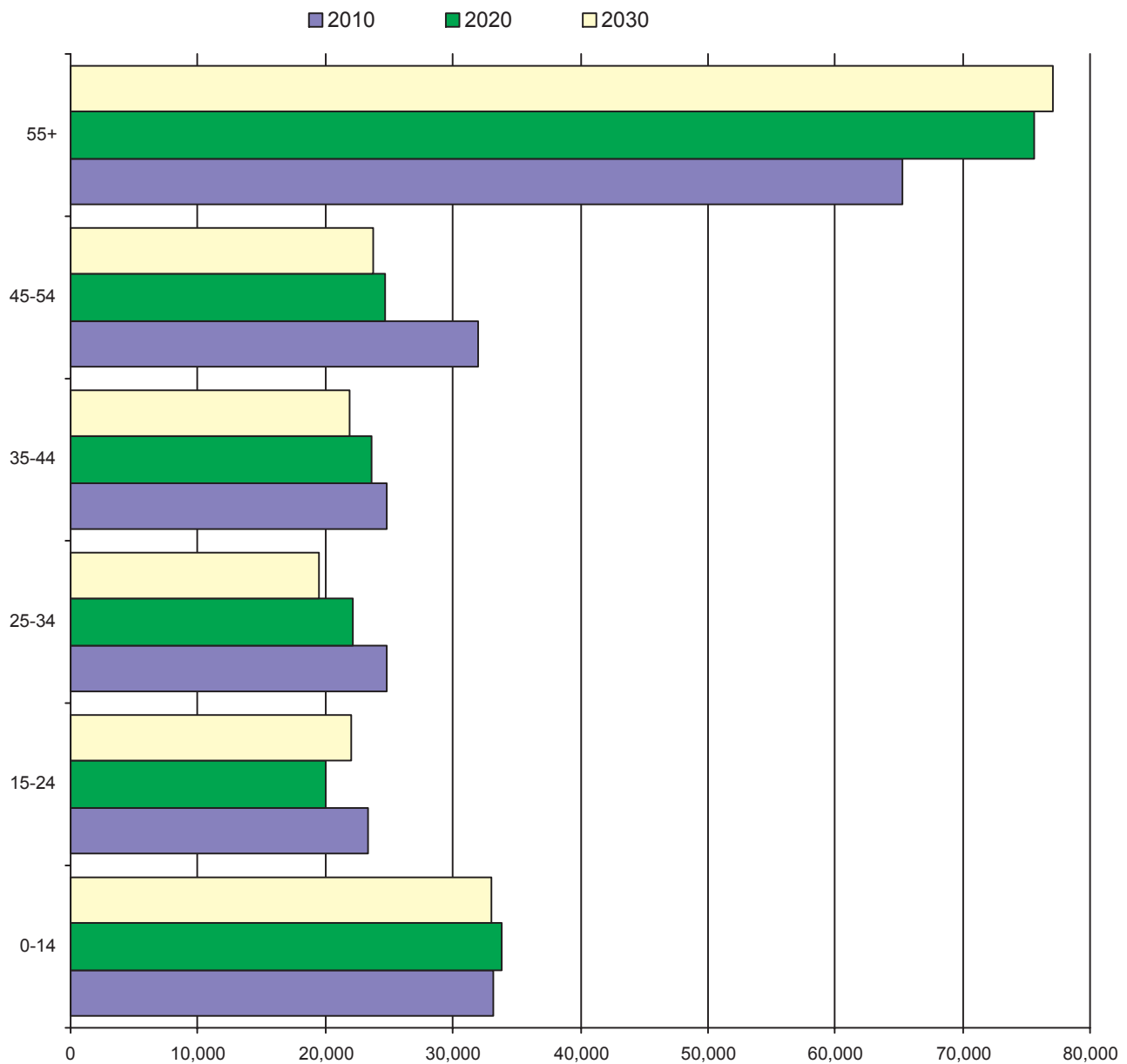
## Population Change



Data for 2010 - 2030 are projections. Subparts may not add to total due to rounding.  
Source: Virginia Employment Commission, 08/03, U.S. Census Bureau.



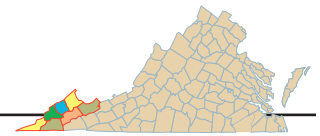
### Population Projections by Age Cohort



	2010	2020	2030
0-14	33,183	33,791	32,979
15-24	23,324	19,977	21,993
25-34	24,803	22,162	19,517
35-44	24,826	23,570	21,934
45-54	31,993	24,675	23,777
55+	65,270	75,625	77,100
<b>Total</b>	<b>203,400</b>	<b>199,800</b>	<b>197,300</b>

Subparts may not add to total due to rounding.

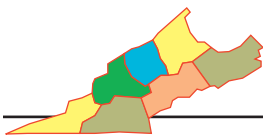
Source: Virginia Employment Commission.



## English Language Skills

(Age 5 and over)

WIA I		
	Total	Speak English less than well
Buchanan County	25,665	39
Dickenson County	15,506	41
Lee County	22,220	80
Russell County	28,724	55
Scott County	22,219	30
Tazewell County	42,209	91
Wize County	37,847	99
Norton city	3,690	16
<b>WIA I</b>	<b>198,080</b>	<b>451</b>
<b>Virginia</b>	<b>6,619,266</b>	<b>143,865</b>
<i>Percent of Individuals who speak English less than well</i>		
Virginia	2.17%	
WIA I	0.23%	



### Commuting Patterns<sup>1</sup>

Out-Commute (From)	In-Commute (To)															
		Buchanan	Dickenson	Lee	Russell	Scott	Tazewell	Wise	Norton	Total From County/ City To WIA I	Other VA Localities	North Carolina	Other Out of State	Total From County/ City:	Total In State	Total Out of State
	Buchanan		186		352		614	80		1,232	324	39	640	2,235	1,556	679
	Dickenson	216		11	227		62	1,024	427	1,967	161	20	119	2,267	2,128	139
	Lee	12	16			271		1,079	122	1,500	174	835	598	3,107	1,674	1,433
	Russell	376	96	16		84	854	590	181	2,197	1,687	321	77	4,282	3,884	398
	Scott		21	137	93		23	348	104	716	452	4,308		5,476	1,168	4,308
	Tazewell	886	16		563	11		75		1,551	1,148		2,772	5,471	2,699	2,772
	Wise	13	348	306	387	333	24		3,175	4,586	422	320	179	5,507	5,008	499
Norton	8	9	22		31	12	444		526	15	49	5	595	541	54	
Total To County/City From WIA I		1,511	692	482	1,622	730	1,589	3,640	4,009							
Other VA Localities		265	81	50	629	70	516	458	141							
North Carolina		69	14	271	59	695	33	226	66							
Other Out of State		622	59	192		37	2,053	338	229							
Total to County/City:		2,467	846	995	2,310	1,532	4,191	4,662	4,445							
Total In State		1,776	773	532	2,251	800	2,105	4,098	4,150							
Total Out of State		691	73	463	59	732	2,086	564	295							
										Total WIA Commuting <sup>2</sup>						
										Total Commuting To WIA:					7,173	
										Total Commuting From WIA:					14,665	

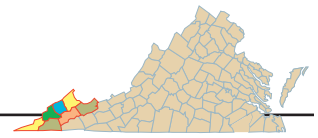
Total WIA Commuting <sup>2</sup>	
Total Commuting To WIA:	7,173
Total Commuting From WIA:	14,665

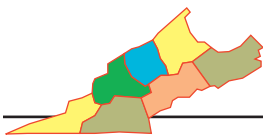
Source: "In-Commuting Patterns" and "Out-Commuting Patterns," 2000 Census data, Virginia Employment Commission, [http://www.vec.state.va.us/vecportal/lbrmkt/lmi\\_menu.cfm](http://www.vec.state.va.us/vecportal/lbrmkt/lmi_menu.cfm)

1. Empty cells within the table indicate that the area's commuting represents less than .2% of total commuting or may be zero.
2. Total Commuting to/from WIA= Other VA Localities + Out of State

Example of how to use the Commuting Patterns table:

**"How many of Lee County's residents commute to Scott County?"** On the horizontal or To axis, locate the column labeled Scott. On the vertical or From axis, locate the row labeled Lee. The intersection of the row and column, 271, is the number of Lee County residents that commute to Scott County.





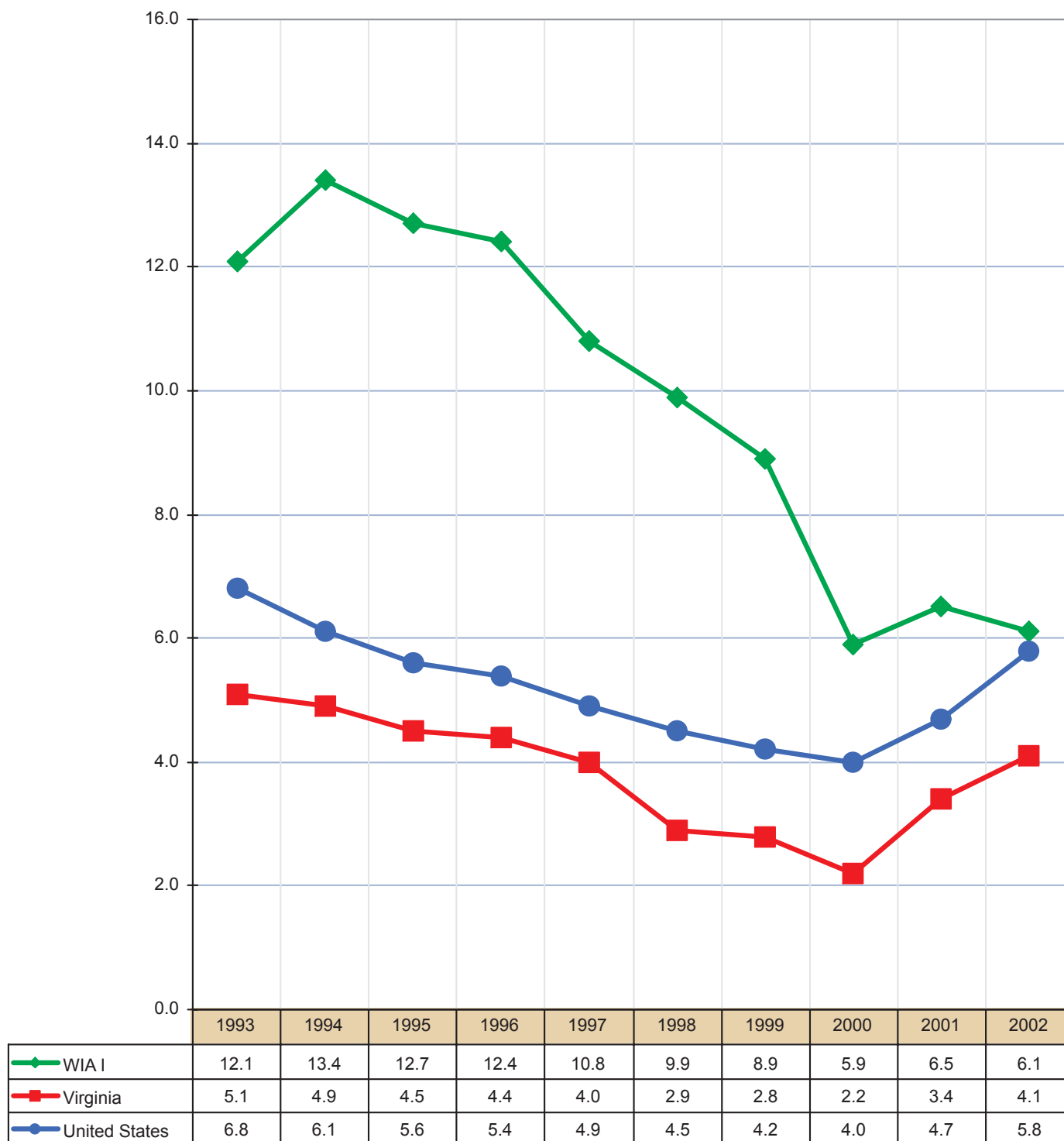
### III. Economic Profile

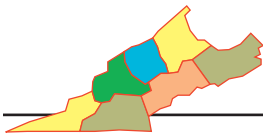
Where population demographics provide information on underlying trends within the labor force, economic data provides more detailed information on the likely demand for specific types of workers. Some key features of WIA I's economy are as follows:

- Unemployment rates are above the statewide average. Although the gap has substantially narrowed, falling from a high of 8.5 percent in 1994 (13.4 percent in WIA I vs. 4.9 percent statewide) to 2.0 percent in 2002 (6.1 percent in WIA I vs. 4.1 percent statewide).
- Employment is concentrated in Government (22.7 percent), Retail Trade (15.4 percent), and Health Care (12.9 percent), and Mining (9.2 percent).
- Most recent new hires have been in Retail Trade (43.8 percent) and Services (24.9 percent).
- Overall personnel turnover is slightly below the statewide average (12.7 percent vs. 13.2 percent). Personnel turnover tends to be highest in the Retail Trade sector (16.0 percent), followed by Agriculture, Forestry, and Fishing (15.1 percent), Construction (14.9 percent), and Services (13.7 percent).
- Monthly wages were highest in Utilities (\$1,069), followed by Management (\$893), Mining (\$874), Federal Government (\$771), and Information (\$616).
- Industries with the largest proportion of workers at or near retirement age (55 and above) are Finance, Insurance, and Real Estate (15.9 percent), Wholesale Trade (14.5 percent), and Services (13.2 percent).
- Employment projections indicate that between 1998 and 2008, most employment growth will occur in Services (13,966 additional jobs) and Retail Trade (4,715 additional jobs) sectors. Manufacturing is projected to lose 7,075 jobs, Mining 2,273, and Agriculture 1,553. Most other sectors are expected to experience small gains in employment.
- Employment projections also indicate that between 1998 and 2008, the biggest growth in occupational employment will be in Nursing Aides and Orderlies (980 openings), Teaching Aides (490 openings), Correctional Officers (490 openings), Home Health Aides (440 openings), and Systems Analysts (420 openings). Alternatively, the biggest declines in occupational employment will be in Cabinet Makers and Bench Carpenters, and Grader, Dozer and Scraper Operators.
- Based on January 2004 Unemployment data, the largest pools of available workers are in the Construction and Extraction; Production; and Transportation and Materials Moving occupations.



## Unemployment Rate Trends



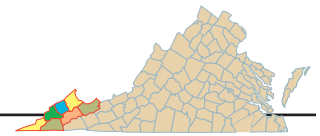


### Employers by Size of Establishment

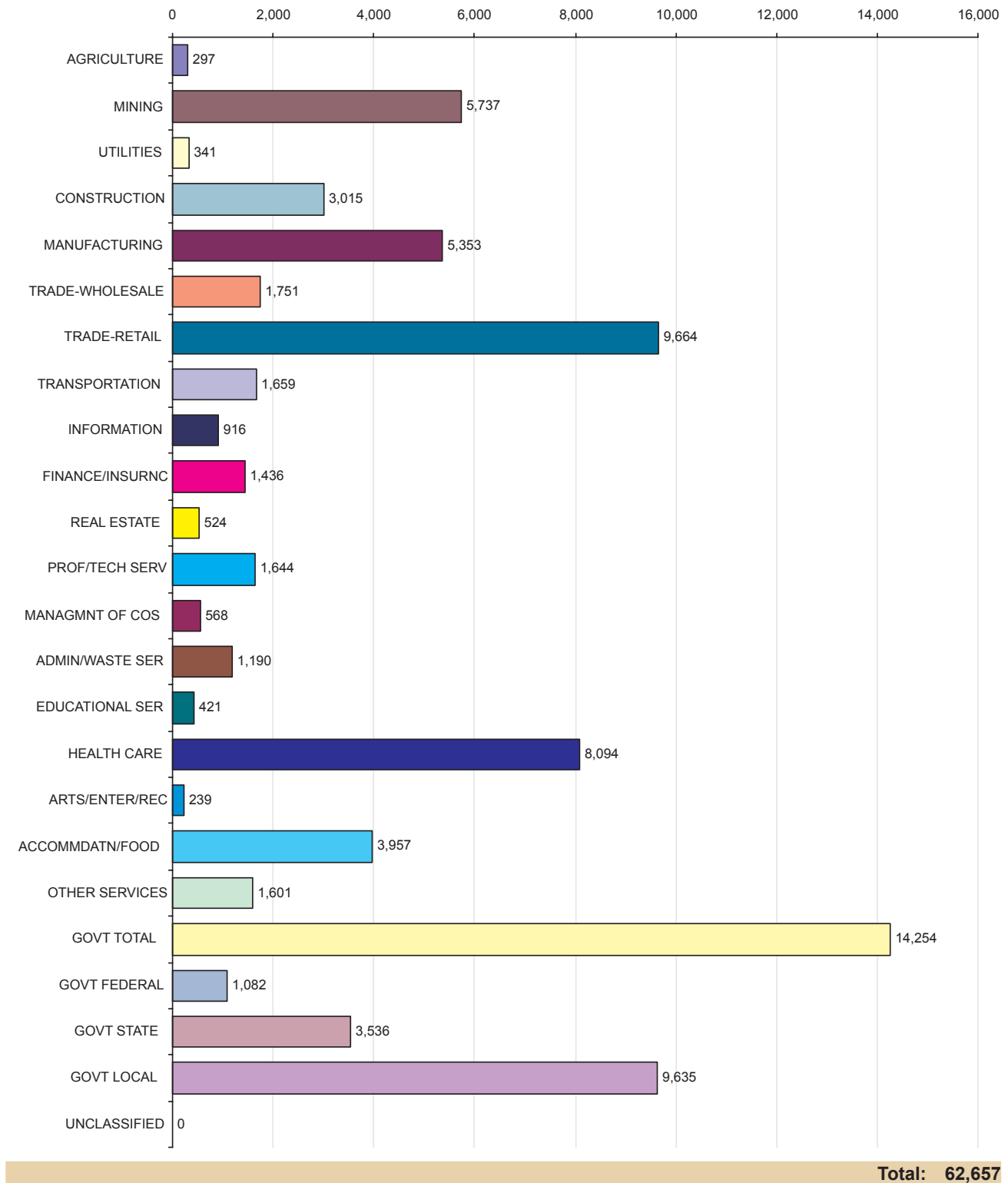
Number of Employees	WIA I	Virginia
0 - 4	2,375	107,195
5 - 9	1,017	35,763
10 - 19	611	25,141
20 - 49	389	18,074
50 - 99	111	6,136
100 - 249	58	3,388
250 - 499	24	1,029
500 - 999	9	409
1000 +	D	229
<b>TOTAL</b>	<b>4,595</b>	<b>197,364</b>

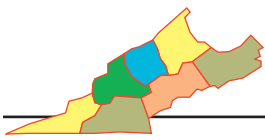
### Employment by Size of Establishment

Number of Employees	WIA I	Virginia
0 - 4	4,543	188,377
5 - 9	6,647	238,634
10 - 19	8,140	340,363
20 - 49	11,647	553,221
50 - 99	7,759	422,392
100 - 249	7,876	503,348
250 - 499	8,404	352,727
500 - 999	5,601	274,493
1000 +	D	543,583
<b>TOTAL</b>	<b>61,639</b>	<b>3,417,138</b>



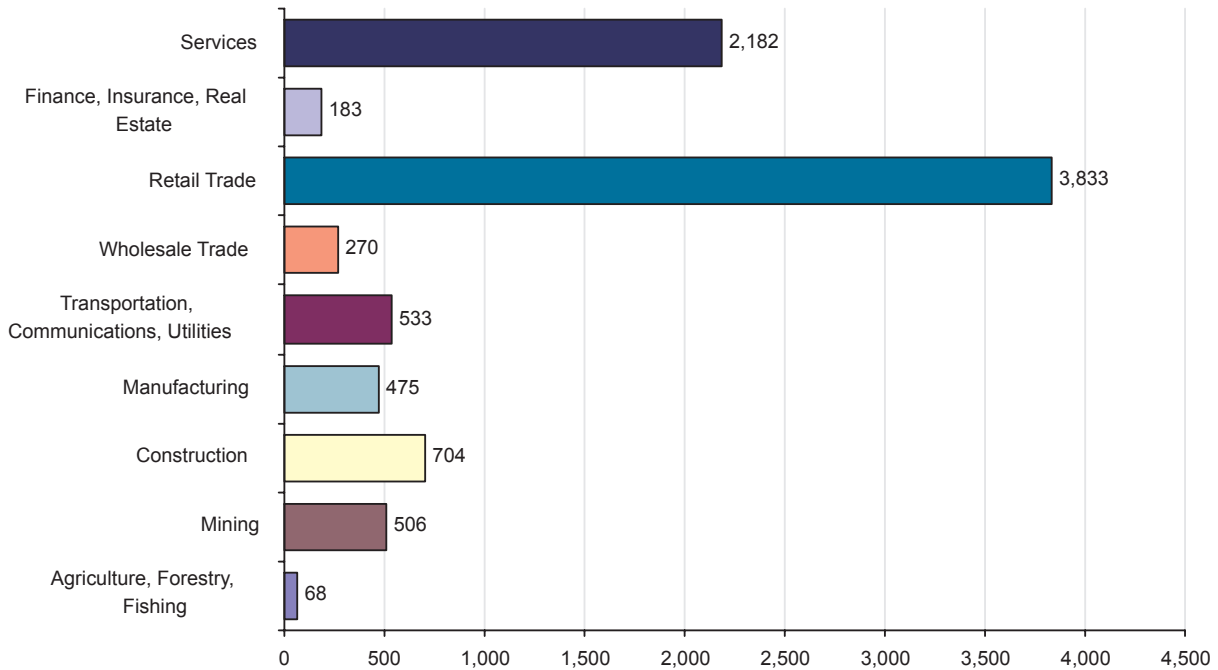
## Employment by Industry





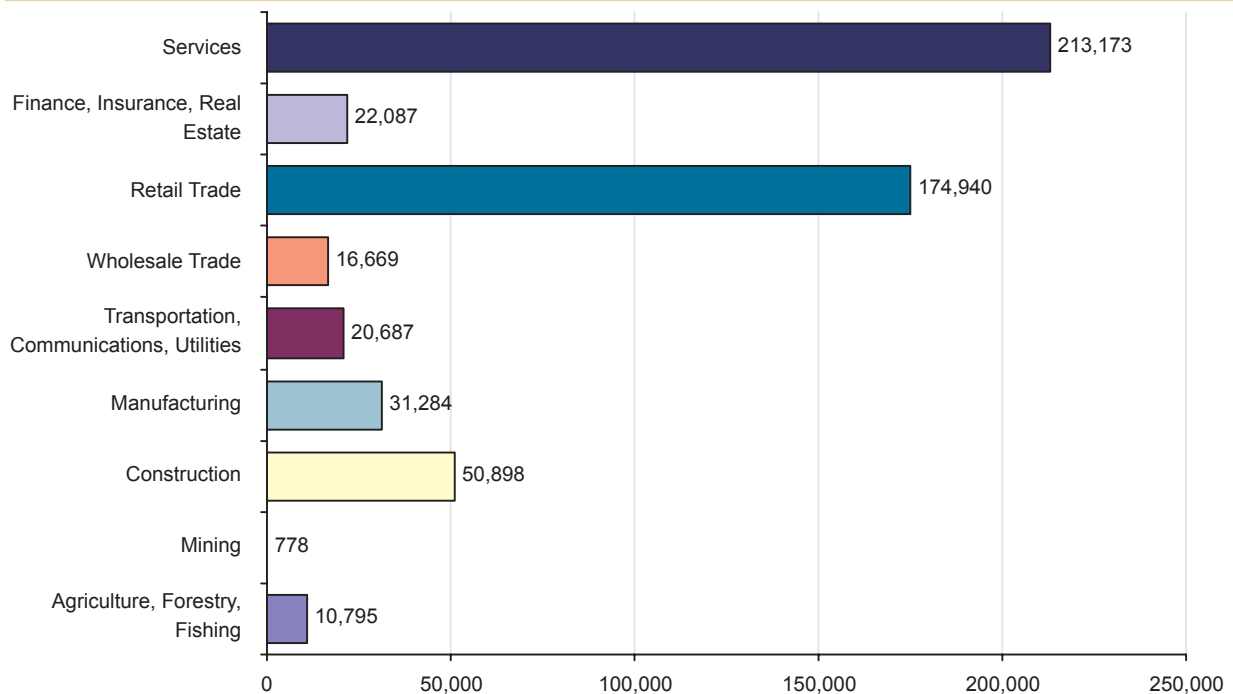
### New Hires by Industry

#### WIA I

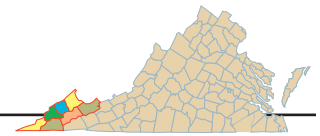


**Total: 8,757**

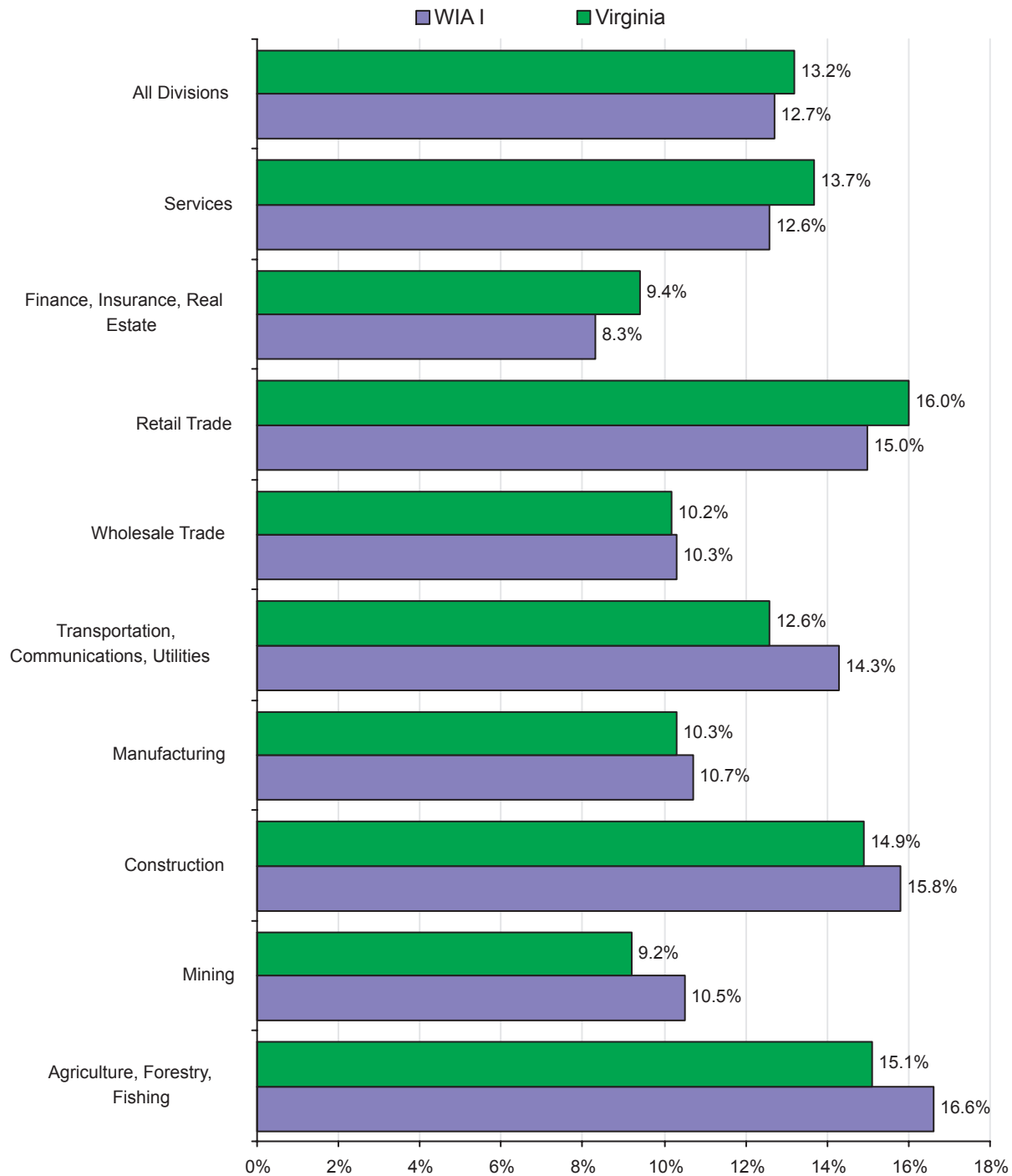
#### Virginia



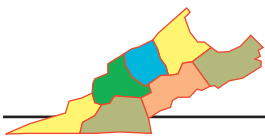
**Total: 541,323**



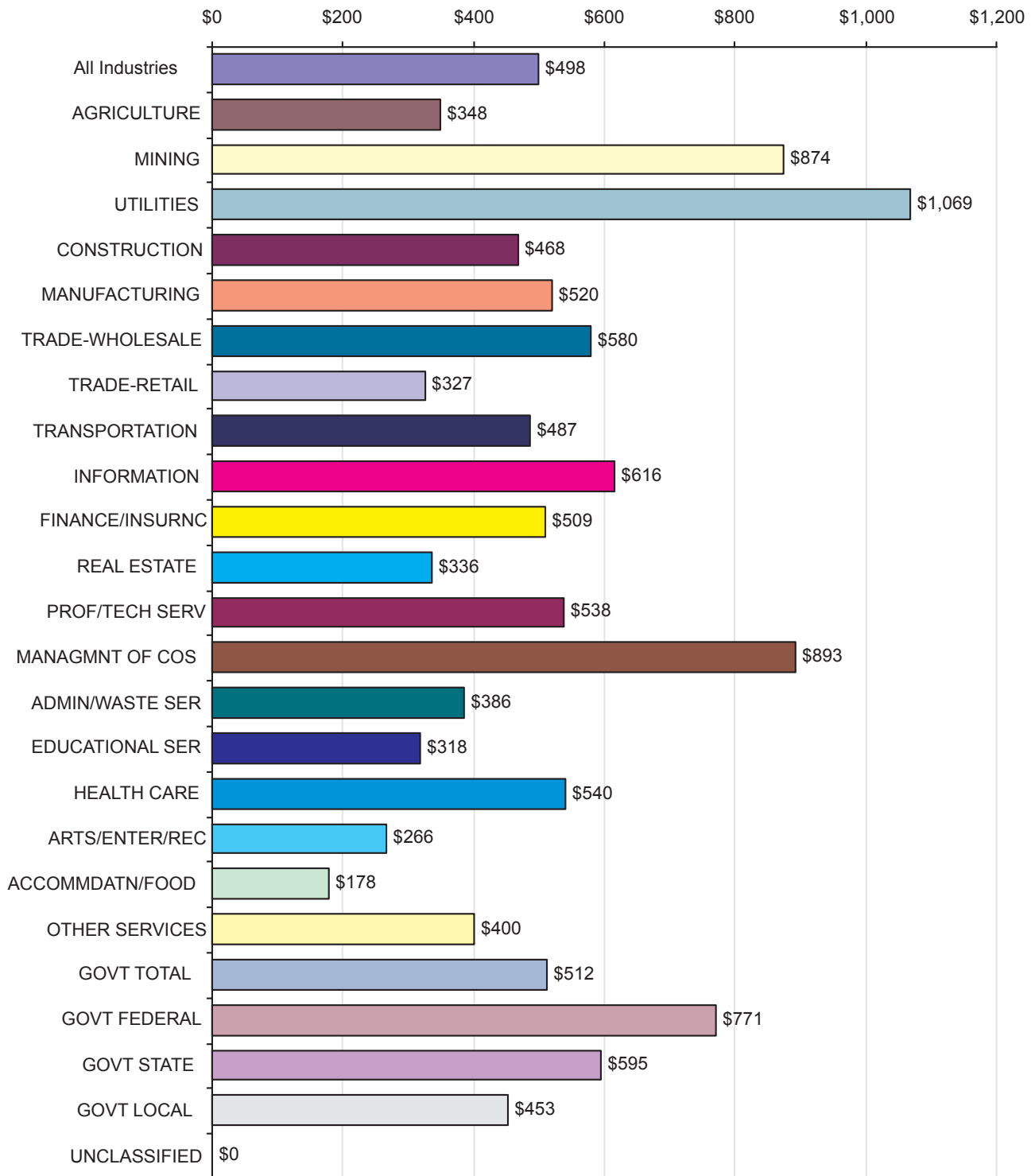
## Turnover by Industry



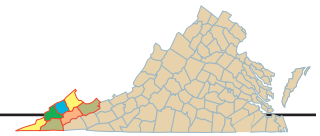
Source: U.S. Census Bureau, Local Employment Dynamics (LED) Program, 2002 annual averages.



### Average Weekly Wage by Industry



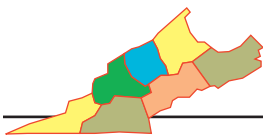
Source: Covered Employment and Wages, annualized 2002.



## Age of Workers by Industry

■ WIA I
 ■ Virginia

	14 - 18	19 - 21	22 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 - 99	14 - 99
<b>Total Employment</b>	1,693	3,327	3,466	11,264	12,524	11,395	4,569	1,147	49,685
	106,356	162,652	180,601	659,050	739,013	576,728	282,064	81,995	2,788,457
<b>Agriculture, Forestry, and Fishing</b>	4	28	35	95	72	46	26	9	313
	2,219	3,048	3,158	9,842	9,481	6,372	2,705	1,600	38,424
<b>Mining</b>	14	117	229	962	1,709	2,570	653	35	6,288
	22	221	366	1,702	2,803	3,498	1,129	136	9,876
<b>Construction</b>	39	184	253	846	765	503	226	49	2,865
	3,907	10,799	13,521	50,770	61,204	41,178	18,359	6,009	205,745
<b>Manufacturing</b>	23	245	367	1,546	1,443	1,223	505	87	5,438
	2,142	9,334	14,693	72,949	106,504	94,364	46,938	7,579	354,504
<b>Transportation, Communications, and Utilities</b>	29	152	198	857	878	770	281	44	3,210
	1,059	4,542	8,097	42,450	52,051	40,960	16,851	3,199	169,208
<b>Wholesale Trade</b>	37	116	126	531	641	569	271	71	2,361
	1,691	4,449	6,486	33,407	43,317	32,948	15,708	4,557	142,564
<b>Retail Trade</b>	1,338	1,787	1,310	3,133	2,974	2,180	1,023	390	14,134
	67,335	76,880	57,338	136,252	130,099	94,331	48,135	20,155	630,522
<b>Finance, Insurance, and Real Estate</b>	17	67	136	463	521	486	239	80	2,008
	1,775	7,281	13,158	53,760	56,683	42,503	20,070	5,079	200,308
<b>Services</b>	193	633	812	3,132	3,522	3,050	1,346	382	13,069
	26,206	46,097	63,782	257,918	276,866	220,571	112,170	33,682	1,037,291



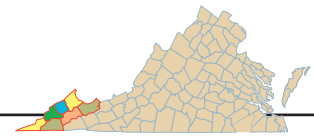
### Total Employment by Industry

	Employment			Percent Change	
	Esti- mated 1998	Pro- jected 2008	Change	Total	Annual
Total All Industries	240,684	252,801	12,117	5.03%	0.49%
Agriculture, Forestry and Fishing, Total	15,599	14,046	-1,553	-9.96%	-1.04%
Mining, Total	7,125	4,852	-2,273	-31.90%	-3.77%
Construction, Total	9,637	10,550	913	9.47%	0.91%
Manufacturing, Total	67,629	60,554	-7,075	-10.46%	-1.10%
Durable Goods Manufacturing, Total	38,856	37,548	-1,308	-3.37%	-0.34%
Nondurable Goods Manufacturing, Total	28,773	23,006	-5,767	-20.04%	-2.21%
Transportation and Public Utilities, Total	9,619	10,603	984	10.23%	0.98%
Transportation, Total	6,989	7,775	786	11.25%	1.07%
Communications and Utilities, Total	2,630	2,828	198	7.53%	0.73%
Wholesale and Retail Trade, Total	46,952	52,110	5,158	10.99%	1.05%
Wholesale Trade, Total	6,872	7,315	443	6.45%	0.63%
Retail Trade, Total	40,080	44,795	4,715	11.76%	1.12%
Finance, Insurance, and Real Estate, Total	5,893	6,276	383	6.50%	0.63%
Services, Total	63,233	77,199	13,966	22.09%	2.02%
Federal Government (Except Post Office)	730	664	-66	-9.04%	-0.94%
State Government (Except Education and Hospitality)	4,857	5,376	519	10.69%	1.02%
Local Government (Except Education and Hospitality)	9,410	10,571	1,161	12.34%	1.17%

### Employment by Major Occupation Group

	Employment			Openings		
	Estimated 1998	Projected 2008	% Change	Replacements	Growth	Total
Total, All Occupations	240,647	252,775	5.04%	57,650	12,128	69,750
Executive, Administrative and Managerial Occupations	13,914	14,841	6.66%	2,530	927	3,470
Professional Specialty Occupations	42,231	49,905	18.17%	8,570	7,674	16,230
Marketing and Sales Occupations	23,654	26,430	11.74%	7,450	2,776	10,230
Administrative Support Occupations, Clerical	29,662	30,958	4.37%	6,210	1,296	7,490
Service Occupations	29,612	34,281	15.77%	9,630	4,669	14,310
Agriculture, Forestry, and Fishing Occupations	14,269	13,183	-7.61%	3,980	-1,086	3,980
Precision Production, Craft and Repair Occupations	30,304	29,586	-2.37%	6,970	-718	6,970
Operators, Fabricators, and Laborers	57,001	53,591	-5.98%	12,310	-3,410	12,310

Source: Industry and Occupational Employment Projections, 1998 — 2008.  
Projection data is for the Southwest Virginia Non-metropolitan area (Region 1).



## Growth Occupations

	Employment			Openings			Wages
	Estimated 1998	Projected 2008	% Change	Replacements	Growth	Total	Median Annual Wage
Systems Analysts	503	893	77.53%	30	390	420	\$44,174
Computer Engineers	196	339	72.96%	10	143	150	\$69,170
Computer Support Specialists	438	706	61.19%	30	268	300	\$27,987
Medical Assistants	369	575	55.83%	90	206	300	\$20,914
Home Health Aides	657	1,003	52.66%	90	346	440	\$15,397
Personal & Home Care Aides	210	312	48.57%	50	102	150	\$13,501
Health Diagnostics Teachers, Pstscndry	313	449	43.45%	90	136	230	\$59,170*
Dental Assistants	315	449	42.54%	50	134	180	\$26,350*
Telemarketers, Door-to-Door Sales	322	448	39.13%	80	126	210	\$20,910*
Teachers, Special Education	690	923	33.77%	60	233	290	\$32,992
Teachers Aides, Paraprofessional	1,083	1,448	33.70%	120	365	490	\$16,280
Corrections Officers	811	1,083	33.54%	220	272	490	\$33,165
Physicians	698	930	33.24%	110	232	340	\$122,885
Social Workers, Med & Psych	416	552	32.69%	50	136	190	\$56,630*
Social/Human Service Assistants	452	597	32.08%	120	145	270	\$21,324
Social Workers, Ex Med, Psych	631	831	31.70%	80	200	280	\$23,770*
Child Care Workers	480	630	31.25%	50	150	200	\$15,780*
Police Patrol Officers	605	790	30.58%	160	185	350	\$26,364
Teachers Aides & Education Assistants	590	756	28.14%	70	166	240	\$14,343
Nursing Aides & Orderlies	2,372	3,026	27.57%	330	654	980	\$15,728

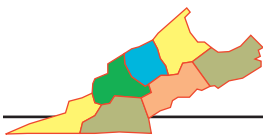
## Declining Occupations

	Employment			Openings		
	Estimated 1998	Projected 2008	% Change	Replacements	Growth	Total
Cement & Gluing Machine Oprs/Tndrs	162	131	-19.14%	40	-31	40
Grader, Dozer & Scraper Operators	536	436	-18.66%	40	-100	40
Typinst, Incl Word Processing	314	256	-18.47%	60	-58	60
Continuous Mining Machine Operators	312	259	-16.99%	80	-53	80
Chemical Techns/Technols, Ex Health	167	139	-16.77%	40	-28	40
Payroll & Timekeeping Clerks	328	273	-16.77%	70	-55	70
Inspectors, Testers, Traders, Precision	363	305	-15.98%	70	-58	70
Cabinetmakers & Bench Carpenters	922	779	-15.51%	110	-143	110
Supervisors, Farm Workers	239	202	-15.48%	20	-37	20
Machine Forming Operators, M/P	360	312	-13.33%	90	-48	90

Source: Industry and Occupational Employment Projections, 1998 - 2008. 2002 OES Wage Survey Data.

Projection data is for the Southwest Virginia Non-metropolitan area (Region 1). Wages are for WIA I.

\* These figures reflect the Median Annual Wage for Virginia. Wage data for these occupations in WIA I were not available.

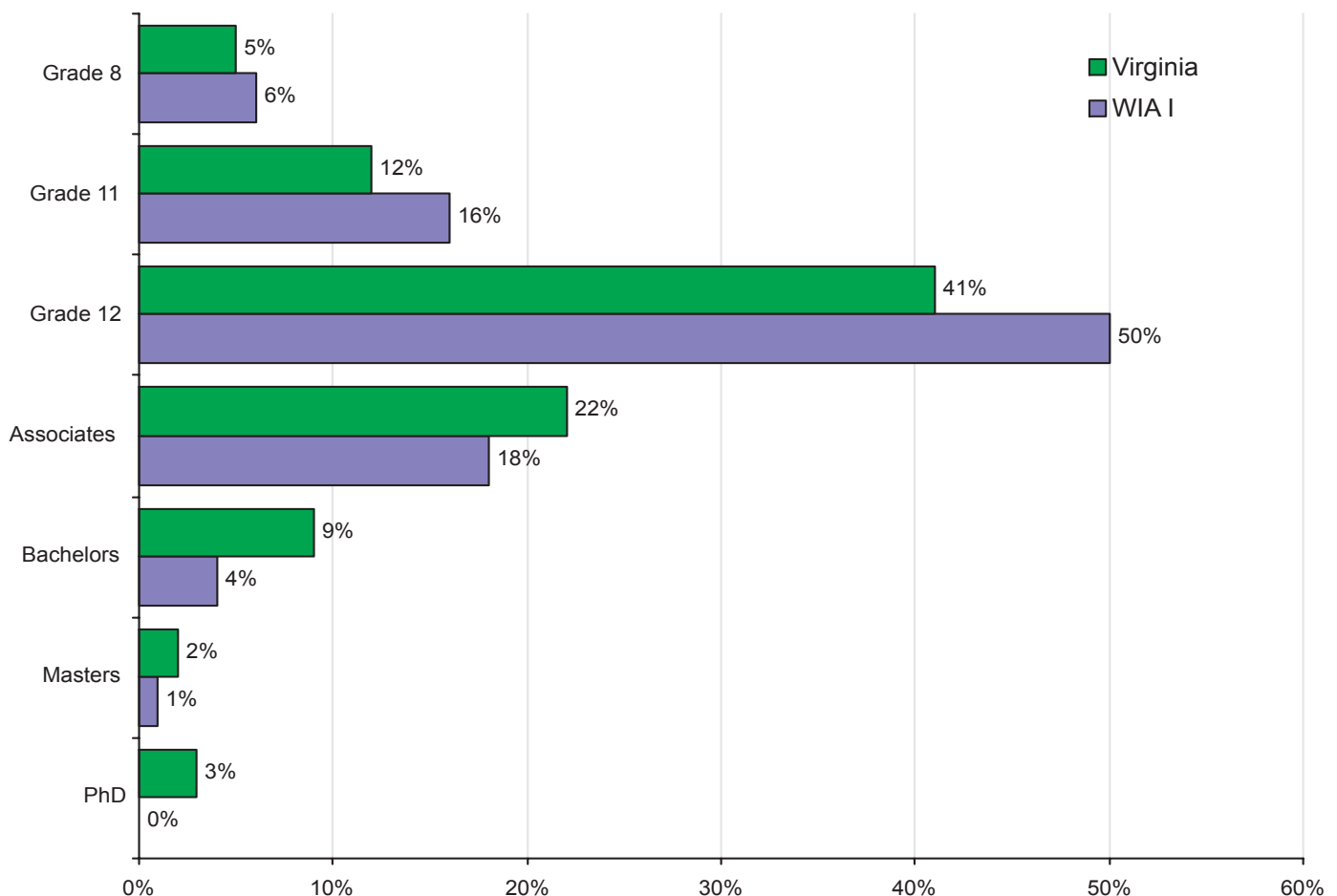


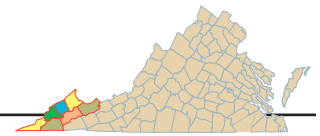
### Characteristics of the Unemployed

Marketing the local labor force to new or expanding companies requires information about potential employees that would be available for immediate hire. Monthly data, collected as unemployed individuals apply for unemployment insurance benefits, provide information on various characteristics of the unemployed claimants. Demographic characteristics are recorded for age, race, sex, and education level. In addition, the industry of last employment and the occupation held in the most recent job is also part of the information collected when applicants register for unemployment insurance benefits.

As seen in the chart below, 50% of the unemployed claimants in Southwestern Virginia have a grade 12 education level, as compared to only 41% of claimants statewide. On the other hand, at the level of Associates degree and higher, Southwestern Virginia has a smaller percentage of claimants relative to the state. While Southwestern Virginia has almost 1,230 unemployed claimants with at least an Associates degree, some of the other regions of the state have a higher ratio of claimants with post-secondary education.

**Unemployed Claimants by Education Level**





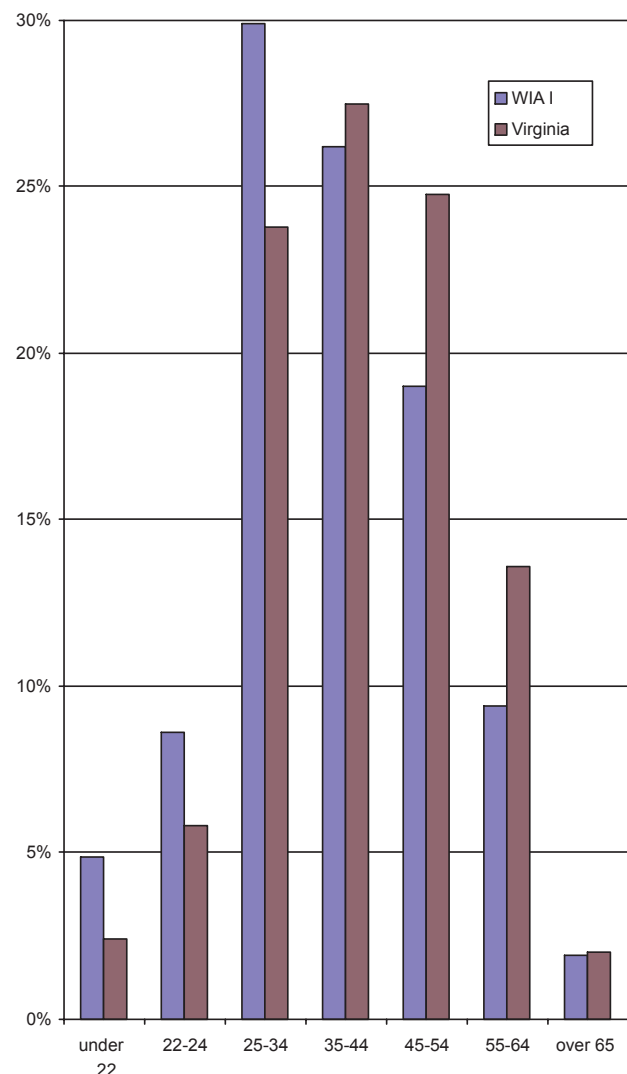
## Characteristics of the Unemployed

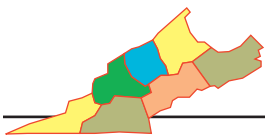
Construction and Extraction workers comprise the largest category of unemployed beneficiaries in Southwestern Virginia, accounting for 28% of total claimants in February 2004. Production workers and Transportation and Material Moving workers also account for a significant share of the unemployed claimants, collectively representing over 31% of the total. Employers requiring workers in these occupation categories will find an abundant supply.

### Claimants by Occupation

OCCUPATION	Number of Claimants
Management	204
Business and Financial Operations	24
Computer and Mathematical	51
Architecture and Engineering	44
Life, Physical, and Social Science	24
Community and Social Services	15
Legal	3
Education, Training, and Library	14
Arts, Design, Entertainment, Sports, and Media	9
Healthcare Practitioners and Technical	103
Healthcare Support	80
Protective Service	144
Food Preparation and Serving Related	219
Building and Grounds Cleaning and Maintenance	177
Personal Care and Service	13
Sales and Related	328
Office and Administrative Support	384
Farming, Fishing, and Forestry	47
Construction and Extraction	1,522
Installation, Maintenance, and Repair	283
Production	1,035
Transportation and Material Moving	627
Military Specific	1
SOC INA	4
<b>TOTAL</b>	<b>5,355</b>

### Claimants by Age





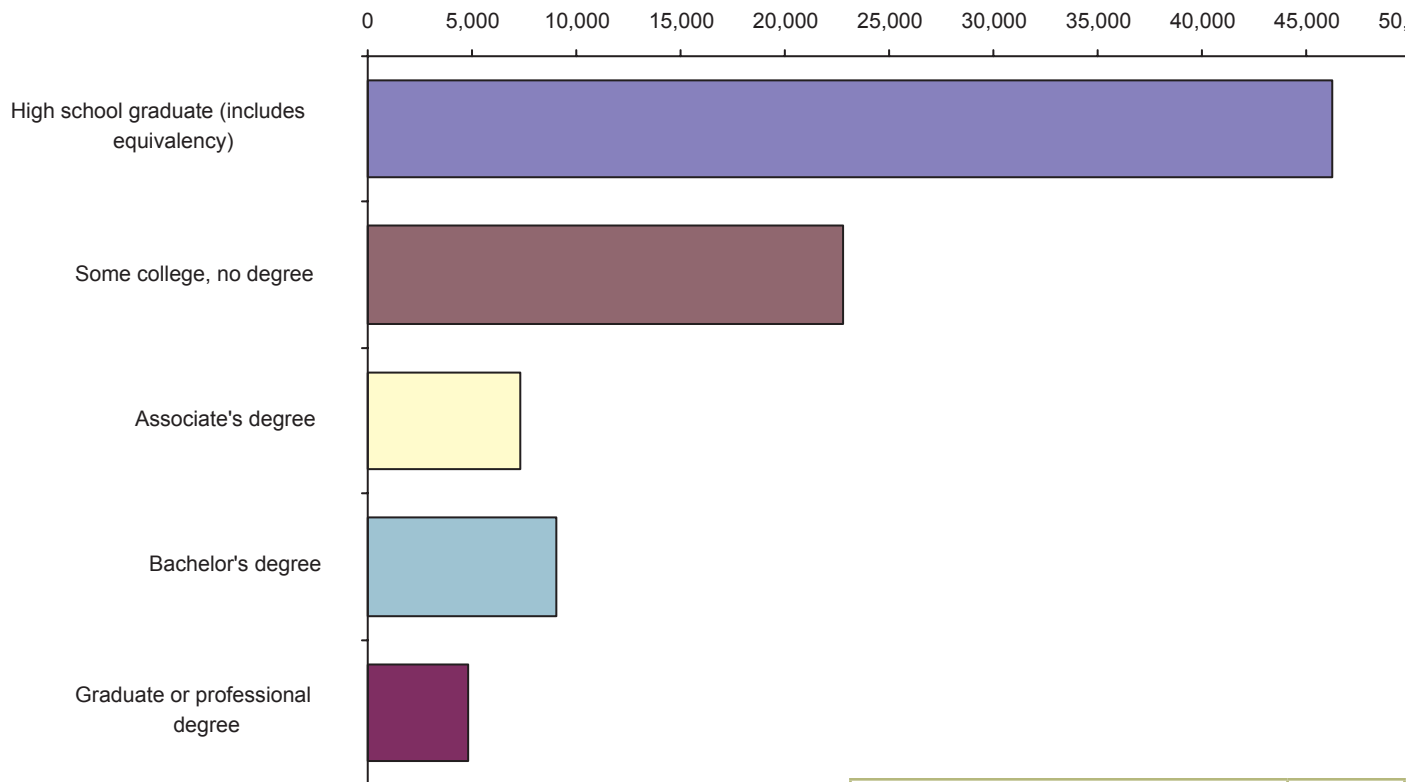
## IV. Education Profile

Education data describe the human capital embodied in the current labor force and provide insight into the education and training that will be required to fill the ranks of the future labor force. Some key features of the WIA I's education and training environment are as follows:

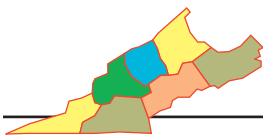
- Educational attainment at the baccalaureate level and above is low relative to the state as a whole.
- An assessment of the occupation-driven demand for local training needs indicates that between 1998 and 2008 the greatest demand for graduates from:
  - *Post-secondary vocational programs* will be in Auto Mechanic/Technician and Licensed Practical Nursing.
  - *Associate's degree programs* will be in Registered Nursing.
  - *Baccalaureate degree programs* will be in Accounting, Elementary and Secondary Education, and Physical Education.
- An assessment of the occupation-driven demand for worker skills indicates that between 1998 and 2008 there will a small increase in the skill levels required in *reading for information* and *writing*.



## Education Level



Population 25 years and over	145,368
High school graduate (includes equivalency)	46,228
Some college, no degree	22,836
Associate's degree	7,342
Bachelor's degree	9,073
Graduate or professional degree	4,852



## Occupation-Driven Training Projection

In this section we use Virginia Employment Commission's (VEC's) occupational employment projections for Region 1 – Southwest Virginia,<sup>1</sup> in combination with a crosswalk developed by the National Crosswalk Service Center (NCSC) to “map” occupations into their prerequisite education and training programs.<sup>2</sup> Often these are many-to-many relationships where one occupation maps into several alternative education and training programs, and one program serves as a conduit into multiple occupations. The analysis is then further refined by using a classification scheme developed by the Bureau of Labor Statistics (BLS) to “sort” occupations according to the minimum degree or award typically required for employment in that occupation.<sup>3</sup> Through this combination of steps, we are able to use VEC's occupational employment projections to predict the occupation-driven demand for specific education and training programs

within the Southwest Virginia region.<sup>4</sup> The method used to accomplish this task is not new and has been successfully employed in earlier studies conducted in several states, including Virginia.<sup>5</sup>

The table that follows depicts the annual occupation-driven demand for training needs in the Southwest Virginia region for the 1998 to 2008 period, as derived from this analysis. As these data show, the largest numbers of needed graduates are in auto repair (e.g., Auto Mechanic/Technician), education (e.g., Elementary Teacher Education and General Education), and health (e.g., Registered Nurse and Licensed Practical Nurse).

<sup>1</sup> Region 1—Southwest Virginia includes Bland, Buchanan, Carroll, Craig, Dickenson, Floyd, Franklin, Giles, Grayson, Henry, Lee, Montgomery, Patrick, Pulaski, Russell, Smyth, Tazewell, Wise, and Wythe County, and the cities of Galax, Martinsville, Norton, and Radford.

<sup>2</sup> The National Crosswalk Service Center (NCSC) is funded by the U.S. Department of Labor, Employment and Training Administration. This crosswalk identifies the prerequisite instructional programs necessary for employment in 651 specific occupations.

<sup>3</sup> The Bureau of Labor Statistics classifies occupations according to eleven education and training categories. Four of these involve on-the-job training or work experience only and the remaining seven require some level of postsecondary education (i.e., first-professional degree, doctoral degree, master's degree, bachelor's degree, associate's degree, or postsecondary vocational training). For purposes of this study, we restrict the analysis to occupations that fall within these seven education and training categories.

<sup>4</sup> More formally, the demand for education and training programs is calculated as:

$$DCIP_i = \sum Dcip_{ji}$$

Where,

$$Dcip_{ji} = (SOC_j)(GCIP_i / \sum GCip_{ij})$$

and,

$DCIP_i$  = the annual demand for instructional program  $i$

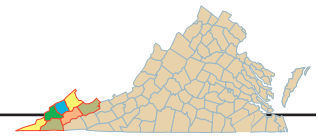
$\sum Dcip_{ji}$  = the annual demand for instructional program  $i$  across all occupation(s)  $j$

$SOC_j$  = the projected annual openings for occupation  $j$

$GCIP_i$  = Virginia graduates from instructional program  $i$  (for academic year 2000-01)

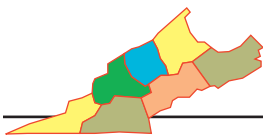
$\sum GCip_{ij}$  = Virginia graduates from all instructional program(s)  $i$  (for academic year 2000-01) related to occupation  $j$

<sup>5</sup> Similar methods are used in at least seven states (California, Georgia, Idaho, Illinois, New Jersey, Utah, and Virginia) to project anticipated education and training demands. For an excellent exposition of this method see, William J. Drummond and Jan L. Youtie, “Occupational Employment, Demand for College Graduates, and Migration: A Statewide View,” a report to the Board of Regents, University System of Georgia, 1999. For an example of how this method has been used previously in Virginia see, A. Fletcher Mangum, “System-Wide Needs Assessment for Virginia Education,” State Council of Higher Education for Virginia, March 28, 2002, p.90.



## Annual Occupation-Driven Training Needs in the Southwest Virginia Region, 1998 - 2008

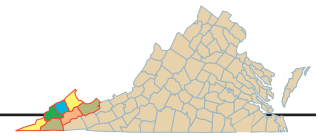
Program	First Professional	Doctoral Degree	Master's Degree	Work Experience plus degree	Bachelor's Degree	Associate's Degree	Postsecondary Vocational Training	Total
Accounting					27			27
Administrative Assistant / Secretarial Science, General							9	9
Aerospace, Aeronautical and Astronautical Engineering					2			2
Agricultural Animal Husbandry and Production Management				1	1			2
Agricultural Business and Management, General				4				4
Agricultural Business / Agribusiness Operations				4				4
Agricultural Production Workers and Managers, General				1				1
Agricultural Teacher Education (Vocational)					2			2
Animal Sciences, General				9				9
Architecture					2			2
Art Teacher Education					6			6
Art, General				1				1
Audiology/Hearing Sciences			1					1
Auto / Automotive Mechanic / Technician							48	48
Automotive Engineering Tech / Technician							3	3
Barber/Hairstylist							2	2
Bilingual/Bicultural Education					3			3
Biology Teacher Education					1			1
Biology, General		1						1
Business Administration and Management, General				174	11			185
Business Computer Programming / Programmer					3			3
Business Marketing and Marketing Management				2				2
Business Systems Analysis and Design					1			1
Business Systems Networking and Telecommunications						7		7



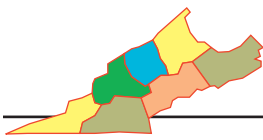
Program	First Professional	Doctoral Degree	Master's Degree	Work Experience plus degree	Bachelor's Degree	Associate's Degree	Postsecondary Vocational Training	Total
Business Teacher Education (Vocational)					2			2
Cardiovascular Tech / Technician						3		3
Chemical Engineering					3			3
Chemistry, General					2			2
Child Care and Guidance Workers and Managers, General					18			18
Child Care Provider / Assistant					7			7
Child Care Services Worker					2			2
City/Urban, Community and Regional Planning			6					6
Civil Engineering, General					7			7
College/Postsecondary Student Counseling and Personnel			1					1
Communication Disorders, General			3					3
Communication Systems Installer and Repairer							4	4
Communications Technol. / Technicians, Other							1	1
Community Organization, Resources and Services				1				1
Computer and Information Sciences, General					25			25
Computer and Information Sciences, Other					1			1
Computer Engineering					4			4
Computer Engineering Tech / Technician						2		2
Computer Installer and Repairer							1	1
Computer Maintenance Tech/ Technician							1	1
Computer Programming					6			6
Computer System Analysis					1			1
Computer Teacher Education					2			2
Cosmetic Services, General							1	1
Cosmetologist							16	16
Counselor Education Counseling and Guidance Services			13					13
Court Reporter							1	1
Dental Hygienist						11		11

# Education Profile

WIA I



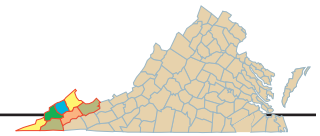
Program	First Professional	Doctoral Degree	Master's Degree	Work Experience plus degree	Bachelor's Degree	Associate's Degree	Postsecondary Vocational Training	Total
Dentistry (DDS, DMD)	4							4
Design and Applied Arts, Other					1			1
Design and Visual Communications					3			3
Dietetics / Human Nutritional Services					1			1
Economics, General					2			2
Education Administration and Supervision, General				10				10
Education Administration and Supervision, Other				1				1
Education of the Specific Learning Disabled					1			1
Education of the Speech Impaired					1			1
Education, General				19	106			125
Educational Supervision				1				1
Electrical and Electronic Engineering – Related Tech / Technician						2		2
Electrical and Electronics Equipment Installer and Repairer							1	1
Electrical, Electronic and Communications Engineering Tech / Technician						3		3
Electrical, Electronics and Communication Engineering					13			13
Elementary Teacher Education					58			58
Elementary, Middle and Secondary Education Administration				2				2
Emergency Medical Tech / Technician							8	8
Engineering / Industrial Management				15	1			16
English Teacher Education					9			9
Enterprise Management and Operation, General				2				2
Farm and Ranch Management				4				4
Fashion Design and Illustration					1			1
Film/Video and Photographic Arts, Other							1	1
Finance, General				18	11			29



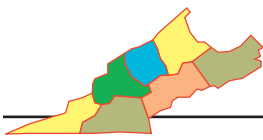
Program	First Professional	Doctoral Degree	Master's Degree	Work Experience plus degree	Bachelor's Degree	Associate's Degree	Postsecondary Vocational Training	Total
Financial Planning					1			1
Financial Services Marketing Operations					1			1
Food and Nutrition Science					1			1
Foods and Nutrition Studies, General					2			2
Foreign Languages Teacher Education					1			1
Funeral Services and Mortuary Science						3		3
General Buying Operations					2			2
General Retailing Operations					3			3
Geology					1			1
Graphic Design, Commercial Art and Illustration				1				1
Health and Physical Education, General					2			2
Health Teacher Education					4			4
Higher Education Administration				1				1
History Teacher Education					1			1
Home Economics Teacher Education (Vocational)					1			1
Human Resources Management				4	15			19
Human Resources Management, Other					2			2
Industrial Design					1			1
Industrial/Manufacturing Engineering					4			4
Information Sciences and Systems					12	9		21
Insurance Marketing Operations					6			6
Interior Design					1			1
International Business				5				5
Investments and Securities				1	4			5
Junior High / Intermediate / Middle School Teacher Education					4			4
Juridical Science / Legal Specialization (LLM, MCL, JSD)	1							1
Labor/Personnel Relations and Studies				1	2			3
Law (LLB, JD)	12							12

# Education Profile

# WIA I



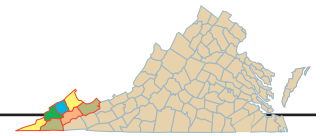
Program	First Professional	Doctoral Degree	Master's Degree	Work Experience plus degree	Bachelor's Degree	Associate's Degree	Postsecondary Vocational Training	Total
Law and Legal Studies, Other	1							1
Legal Administrative Assistant / Secretary							1	1
Library Science, Other			1					1
Library Science / Librarianship			12					12
Make-Up Artist							1	1
Management Information Systems and Business Data Processing					11	14		25
Management Science			1					1
Mathematics Teacher Education					6			6
Mechanical Engineering					9			9
Medical Administrative Assistant / Secretary							2	2
Medical Office Management							1	1
Medical Pharmacology and Pharmaceutical Sciences	1							1
Medical Records Tech / Technician						6		6
Medical Transcription							4	4
Medicine (MD)	29							29
Mining and Mineral Engineering					2			2
Music Teacher Education					11			11
Natural Resources Conservation, General					1			1
Nursing (R.N. Training)						97		97
Nursing Anesthetics (Post-R.N.)						1		1
Nursing Science (Post-R.N.)						5		5
Nursing, Adult Health (Post-R.N.)						1		1
Nursing, Family Practice (Post-R.N.)						1		1
Nursing, Other						14		14
Occupational Therapy					6			6
Occupational Therapy Assistant						3		3
Optometry (O.D.)	2							2
Organizational Behavior Studies					4			4
Osteopathic Medicine (D.O.)	5							5
Paralegal/Legal Assistant						9		9
Parks, Recreation and Leisure Facilities Management					1			1



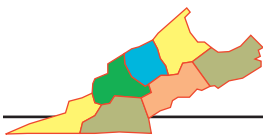
Program	First Professional	Doctoral Degree	Master's Degree	Work Experience plus degree	Bachelor's Degree	Associate's Degree	Postsecondary Vocational Training	Total
Parks, Recreation and Leisure Studies					1			1
Pharmacy (B. Pharm., Pharm D.)	10							10
Pharmacy, other	1							1
Photography							1	1
Physical Education Teaching and Coaching					25			25
Physical Therapy			9					9
Physical Therapy Assistant						9		9
Physician Assistant					5			5
Practical Nurse (LPN Training)							54	54
Psychiatric / Mental Health Services Technician							2	2
Psychology, General			4					4
Public Administration				13				13
Public Administration and Services, Other				1				1
Public Policy Analysis				1				1
Public Relations and Organizational Communications					5			5
Purchasing, Procurement and Contracts Management					14			14
Radio and Television Broadcasting Tech / Technician							1	1
Reading Teacher Education					14			14
Real Estate					3		3	6
Recreational Therapy					1			1
Respiratory Therapy Technician						7		7
School Psychology			1					1
Science Teacher Education, General					3			3
Secondary Teacher Education					16			16
Social Science Teacher Education					2			2
Social Studies Teacher Education					4			4
Spanish Language Teacher Education					1			1
Special Education, General					10			10
Special Education, Other					1			1
Speech-Language Pathology			2					2

# Education Profile

# WIA I



Program	First Professional	Doctoral Degree	Master's Degree	Work Experience plus degree	Bachelor's Degree	Associate's Degree	Postsecondary Vocational Training	Total
Speech-Language Pathology and Audiology			5					5
Sport and Fitness Administration/Management					1			1
Surgical / Operating Room Technician							4	4
Surveying					1			1
Taxation					1			1
Teacher Education, Specific Academic and Vocational Programs					7			7
Technical Teacher Education (Vocational)					2			2
Technology Teacher Education / Industrial Arts Teacher Ed					2			2
Trade and Industrial Teacher Education (Vocational)					3			3
Travel Services Marketing Operations							4	4
Veterinarian Assistant / Animal Health Technician						2		2
Veterinary Medicine (DVM)	3							3
Vocational Rehabilitation Counseling			1					1
Totals	69	1	60	297	591	209	175	1,402



## Work Skills Projection

In this section we use the VEC's occupational employment projections for Region 1 – Southwest Virginia, in combination with occupational skills profiles developed by ACT,<sup>1</sup> to identify the skill sets that will be required to fill projected annual job openings within the region. The skills categories addressed in this analysis are Applied Mathematics, Applied Technology, Listening, Locating Information, Observation, Reading for Information, Teamwork, and Writing. A description of each category, the skills levels associated with it, and the proportion of projected annual job openings that fall within each skill level follow.

### Applied Mathematics

The *Applied Mathematics* assessment measures a person's skill in using mathematical reasoning to solve work-related problems. ACT defines the skills levels associated with this category as follows.

#### Level 3:

- Perform basic mathematical operations using whole numbers and decimals.
- Convert a number from one form into another using whole numbers, fractions, decimals, or percentages.
- Solve problems that are straightforward, involving a single type of mathematical operation.
- Translate easily from a verbal setup to a mathematical equation when all the information needed to solve the problem is provided in logical order and no unrelated information is included.

#### Level 4 (in addition to requirements for previous levels):

- Perform one or two mathematical operations using several positive or negative numbers.
- Add commonly known fractions, decimals, or percentages, or add three fractions that share a common denominator.
- Calculate averages, simple ratios, proportions, and rates, using whole numbers and decimals.

- Reorder verbal information before performing calculations.
- Determine which operations to perform and in what order.
- Read a simple chart or graph to obtain the information needed to solve a problem.

#### Level 5 (in addition to requirements for previous levels):

- Look up and calculate single-step conversions within English or non-English systems of measurement or between systems of measurement.
- Calculate using mixed units and several steps of logic.
- Calculate perimeters and areas of basic shapes.
- Calculate percentage discounts and markups.
- Determine what information, calculations, and unit conversions are needed to find a solution.

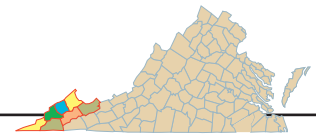
#### Level 6 (in addition to requirements for previous levels):

- Calculate using negative numbers, fractions, ratios, percentages, and mixed numbers.
- Calculate multiple rates for comparison or use in other calculations.
- Find basic areas and volumes of rectangular solids.
- Identify and correct errors in calculations.
- Solve problems involving considerable setup and multiple-step calculations or conversions.

#### Level 7 (in addition to requirements for previous levels):

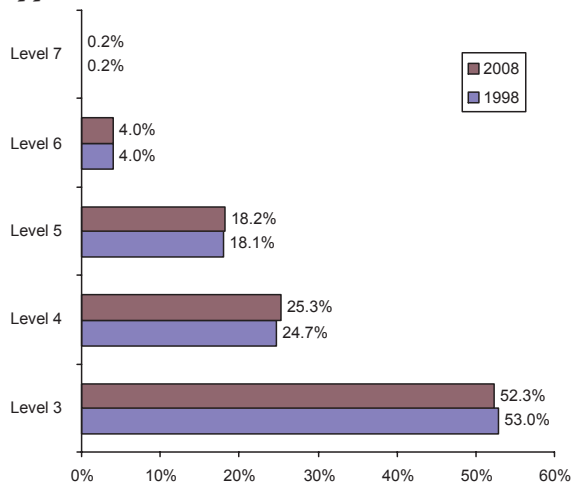
- Calculate using multiple steps of logic.
- Calculate multiple areas and the volumes of spheres, cylinders, and cones.
- Solve problems with more than one unknown.
- Solve problems involving nonlinear functions, such as rates of change.

<sup>1</sup> The occupational skills profiles used in this analysis were provided by ACT. ACT is an independent, non-profit organization that specializes in research and assessment related to education and work. These profiles are based on actual ACT *WorkKeys* assessments of thousands of employed individuals nationally. They represent the most comprehensive and current measure of the work skills required for specific occupations.

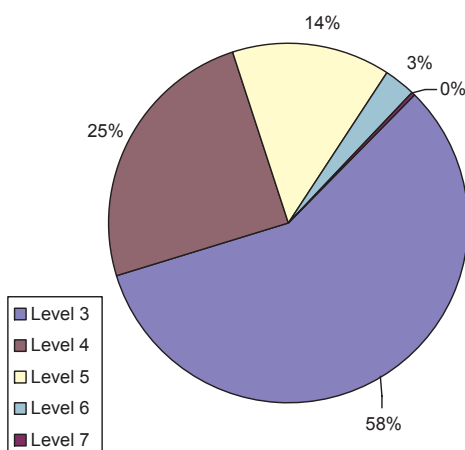


- Calculate by applying basic statistical concepts.
- Derive information needed to solve problems if incomplete or implicit information is presented.

The following figure details the percentage of overall jobs in Region 1 – Southwest Virginia in 1998 and 2008 by required *Applied Mathematics* skills level, as determined by the ACT occupation skills profiles. The second figure provides a similar breakdown for projected annual job openings between 1998 and 2008. These data show that the majority of jobs will require workers with Level 3 *Applied Mathematics* skills.



*Proportion of Jobs in Region 1 – Southwest Virginia by Required Skill Level – Applied Mathematics*



*Annual Openings in Region 1 – Southwest Virginia by Required Skill Level – Applied Mathematics*

## Applied Technology

The *Applied Technology* assessment measures a person's skill in using the basic principles of mechanics,

electricity, fluid dynamics, and thermodynamics to solve problems with machines, equipment, and structures found in the workplace. ACT defines the skills levels associated with this category as follows.

### Level 3:

- Understand the operation of basic hand tools, simple machine components, and uncomplicated systems, such as piping systems, simple electrical heaters, or other equipment found in the home, school, or workplace.
- Apply elementary principles underlying the operation of physical systems, such as the workings of plumbing components or simple electrical systems.

### Level 4 (in addition to requirements for previous levels):

- Understand the operation of moderately complex tools, machines, and systems, such as appliances, pulley-driven equipment, or piping systems that carry more than one fluid.
- Apply elementary principles underlying the operation of physical systems, such as a block and tackle or cooling fins.

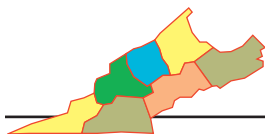
### Level 5 (in addition to requirements for previous levels):

- Use the basic principles of mechanics, electricity, thermodynamics, and fluid dynamics in moderate and advanced applications.
- Understand complex machines and systems, such as the operation of gasoline engines, complex appliances, or an electrical system in a building.

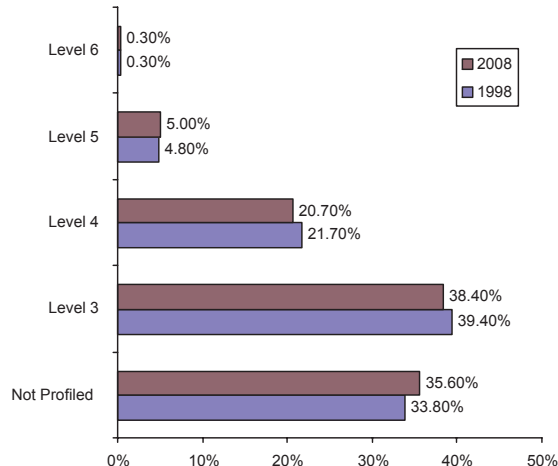
### Level 6 (in addition to requirements for previous levels):

- Use principles of mechanics, electricity, thermodynamics, and fluid dynamics interacting in advanced applications such as air conditioning units.
- Troubleshoot complex systems in which a variety of mechanical, electrical, thermal, or flow faults are potential sources of difficult problems.

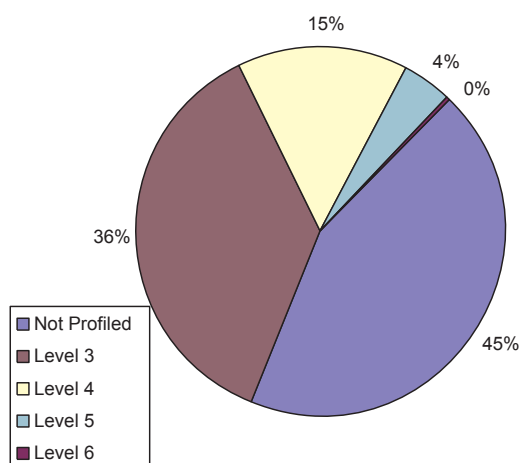
The following figure details the percentage of overall jobs in Region 1 – Southwest Virginia in 1998 and 2008 by required *Applied Technology* skills level, as determined by the ACT occupation skills profiles. The second figure provides a similar breakdown for projected annual job



openings between 1998 and 2008. These data show that the majority of jobs will require workers with Level 3 *Applied Technology* skills. The large “Not Profiled” proportion indicates that ACT has not profiled many of these occupations with respect to *Applied Technology* skills. As a result, it is not possible to include them in the analysis.



**Proportion of Jobs in Region 1 – Southwest Virginia by Required Skill Level – Applied Technology**



**Annual Openings in Region 1 – Southwest Virginia by Required Skill Level – Applied Technology**

### Listening

The *Listening* portion of the *Listening and Writing* assessment measures a person’s skill in listening to and conveying information. ACT defines the skills levels associated with this category as follows.

#### Level 1:

- Write down a small amount of useful information based on a spoken communication.
- Give clues to the gist of the situation or provide sources of further information, but do not include enough information to give the receiver a correct understanding of the situation described in the message.

#### Level 2 (in addition to requirements for previous levels):

- Correctly write down the basic ideas of a spoken message.
- Give a fair amount of useful information, but may miss some of the important details or incorrectly record some of the information.

#### Level 3 (in addition to requirements for previous levels):

- Listen to a spoken communication and record messages that are basically correct.
- Present all the primary details and the relationships among them correctly, but may miss one or two pieces of important information.

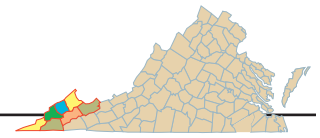
#### Level 4 (in addition to requirements for previous levels):

- Accurately convey the central idea of a spoken communication.
- Correctly record all the important information and the relationships among pieces of information, but may miss or incorrectly record some details or include irrelevant information.

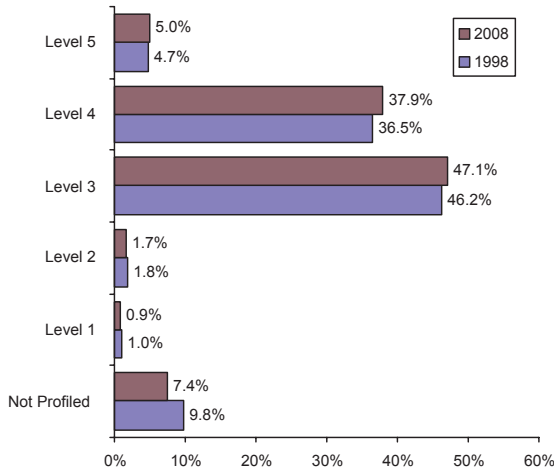
#### Level 5 (in addition to requirements for previous levels):

- Correctly record all the important information and the relationships among pieces of information from a spoken communication.
- Use supporting details to convey insight into the particular situation the message involves.

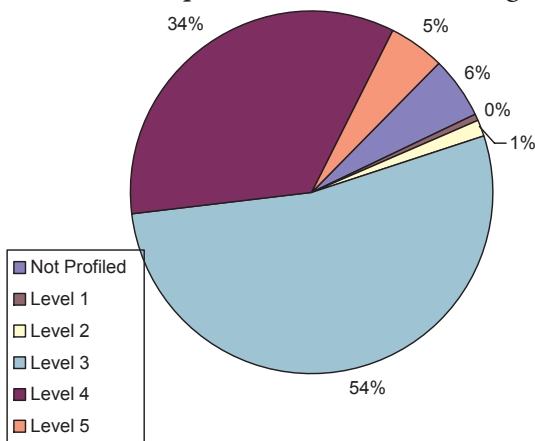
The following figure details the percentage of overall jobs in Region 1 – Southwest Virginia in 1998 and 2008 by required *Listening* skills level, as determined by the ACT occupation skills profiles. The second figure provides a



similar breakdown for projected annual job openings between 1998 and 2008. These data show that the majority of jobs will require workers with Level 3 and Level 4 *Listening* skills.



**Proportion of Jobs in Region 1 – Southwest Virginia by Required Skill Level – Listening**



**Annual Openings in Region 1 – Southwest Virginia by Required Skill Level – Listening**

## Locating Information

The *Locating Information* assessment measures a person's skill in using workplace graphics such as diagrams, floor plans, tables, charts, graphs, forms, and instrument gauges. ACT defines the skills levels associated with this category as follows.

### Level 3:

- Find one or two pieces of information in a graphic.
- Fill in one or two pieces of information that are missing from a graphic.

### Level 4 (in addition to requirements for previous levels):

- Find several pieces of information in graphics.
- Summarize and/or compare information and trends in a single graphic.
- Summarize and/or compare information and trends among more than one graphic by determining the relationships among the graphics.

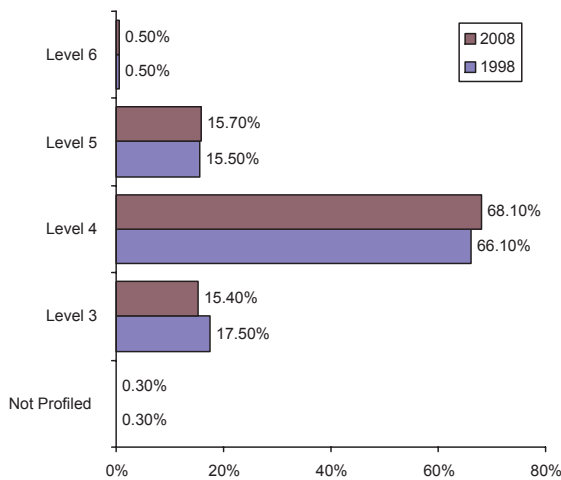
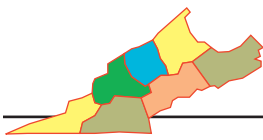
### Level 5 (in addition to requirements for previous levels):

- Summarize and/or compare information and trends in a single graphic.
- Sort through distracting information to summarize and/or compare information and trends presented in more than one workplace graphic.

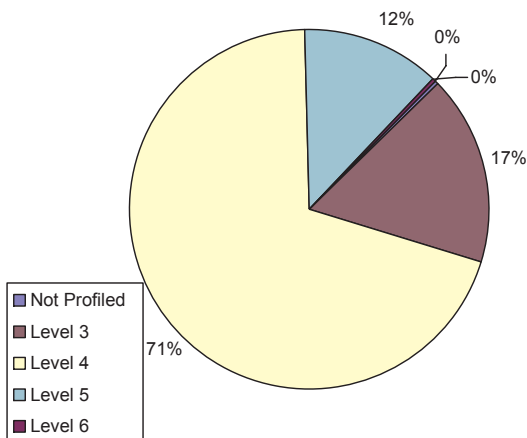
### Level 6 (in addition to requirements for previous levels):

- Draw conclusions from the information presented in very detailed graphics.
- Apply information from these types of graphics to specific situations.
- Analyze data within these types of graphics to make decisions and/or predictions requiring judgments based on the information presented.

The following figure details the percentage of overall jobs in Region 1 – Southwest Virginia in 1998 and 2008 by required *Locating Information* skills level, as determined by the ACT occupation skills profiles. The second figure provides a similar breakdown for projected annual job openings between 1998 and 2008. These data show that the vast majority of jobs will require workers with Level 4 *Locating Information* skills.



**Proportion of Jobs in Region 1 – Southwest Virginia by Required Skill Level – Locating Information**



**Annual Openings in Region 1 – Southwest Virginia by Required Skill Level – Locating Information**

### Observation

The *Observation* assessment measures a person's skill at noticing details and paying attention to instructions and demonstrations. The following is a description of the skills levels associated with this area.

#### Level 3:

- Pay attention.
- Watch and listen to a strongly cued demonstration or set of instructions.
- Recall a few strongly reinforced details of a process or procedure.

#### Level 4:

- Sustain focused attention on the demonstrated instructions, process, or procedures.
- Select and attend to important details.
- Recall a few important, moderately reinforced details about the demonstrated process or procedure.

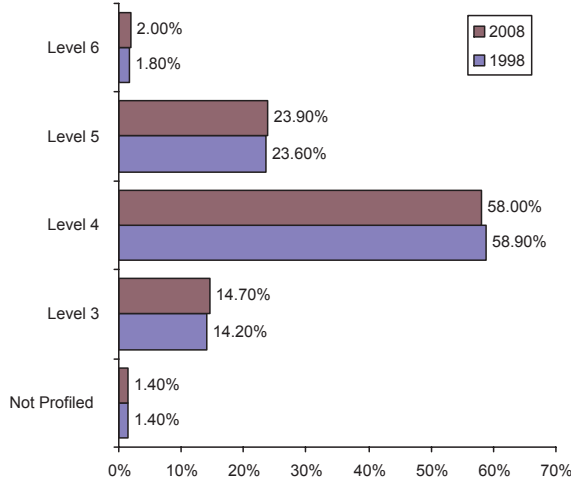
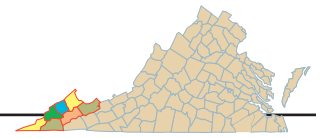
#### Level 5:

- Focus attention on and recall several important aspects of the information presented.
- Ignore irrelevant background information through selective attention to important details.
- Maintain attention to detail.
- Recall several important details about unfamiliar material.

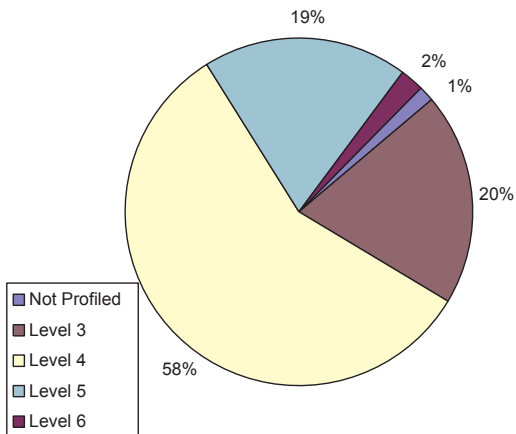
#### Level 6:

- Notice and remember several details that are relevant to the process or procedure being shown.
- Take in and recall incoming sensory information so it can be used to make predictions, comparisons, or evaluations.
- Visualize how a detail or task fits into the entire process or procedure demonstrated.
- Interpret if-then and cause-effect relationships.

The following figure details the percentage of overall jobs in Region 1 – Southwest Virginia in 1998 and 2008 by required *Observation* skills level, as determined by the ACT occupation skills profiles. The second figure provides a similar breakdown for projected annual job openings between 1998 and 2008. These data show that the majority of jobs will require workers with Level 4 *Observation* skills.



*Proportion of Jobs in Region 1 – Southwest Virginia by Required Skill Level – Observation*



*Annual Openings in Region 1 – Southwest Virginia by Required Skill Level – Observation*

## Reading for Information

The *Reading for Information* assessment measures a person's skill in reading and using work-related information including instructions, policies, memos, bulletins, notices, letters, manuals, and governmental regulations. ACT defines the skills levels associated with this category as follows.

### Level 3:

- Identify uncomplicated key concepts and simple details.
- Recognize the proper placement of a step in a sequence of events, or the proper time to perform a task.

- Identify the meaning of a word that is defined within the document.
- Identify the meaning of a simple word that is not defined within the document.
- Recognize the application of instructions given in the document to situations that are also described in the document.

### Level 4:

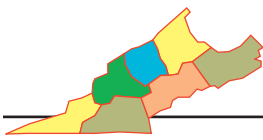
- Identify important details that are less obvious than those in Level 3.
- Recognize the application of more complex instructions, some of which involve several steps, to described situations.
- Recognize cause-effect relationships.
- Determine the meaning of words that are not defined in the document.

### Level 5:

- Identify the paraphrased definition of a technical term or jargon that is defined in the document.
- Recognize the application of technical terms or jargon to stated situations.
- Recognize the definition of an acronym that is defined in the document.
- Identify the appropriate definition of a word with multiple meanings.
- Recognize the application of instructions from the document to new situations that are similar to those described in the document.
- Recognize the application of more complex instructions to described situations, including conditionals and procedures with multiple steps.

### Level 6:

- Recognize the application of jargon or technical terms to new situations.
- Recognize the application of complex instructions to new situations.
- Recognize, from context, the less common meaning of a word with multiple meanings.
- Generalize from the document situations not described in the document.

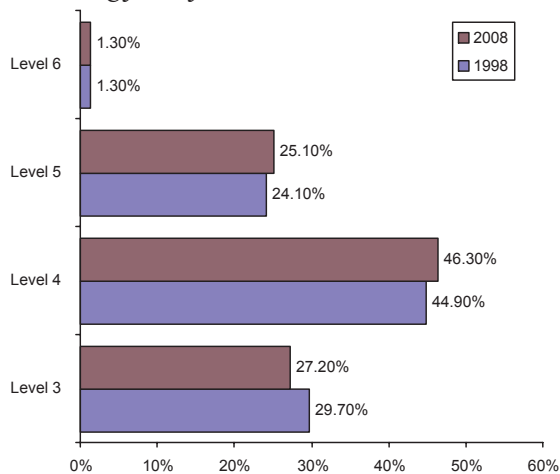


- Identify implied details.
- Explain the rationale behind a procedure, policy, or communication.
- Generalize from the document to a somewhat similar situation.

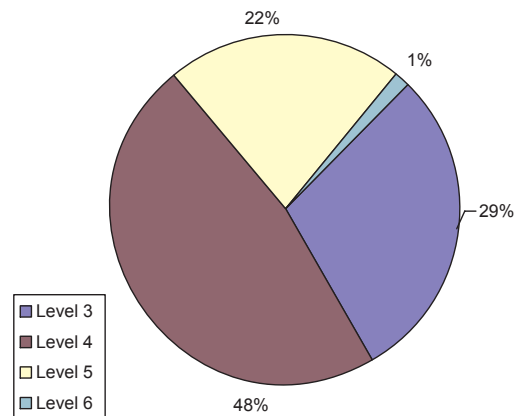
### Level 7:

- Recognize the definitions of difficult, uncommon jargon or technical terms, based on the context of the reading materials.
- Figure out the general principles underlying described situations and apply them to situations neither described in nor completely similar to those in the document.

The following figure details the percentage of overall jobs in Region 1 – Southwest Virginia in 1998 and 2008 by required *Reading for Information* skills level, as determined by the ACT occupation skills profiles. The second figure provides a similar breakdown for projected annual job openings between 1998 and 2008. These data show that the majority of jobs will require workers with Level 4 *Reading for Information* skills.



**Proportion of Jobs in Region 1 – Southwest Virginia by Required Skill Level – Reading for Information**



**Annual Openings in Region 1 – Southwest Virginia by Required Skill Level – Reading for Information**

### Teamwork

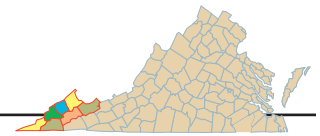
The *Teamwork* assessment measures a person's skill in choosing behaviors and/or actions that simultaneously support relationships within a team and lead toward the accomplishment of work tasks. The following is a description of the skills levels associated with this area.

#### Level 3:

- Identify team goals and ways to work with other team members to accomplish team goals.
- Recognize that a team is having problems finishing a task and identify the cause of those problems.
- Choose actions that actively support the ideas other team members have for accomplishing team goals.
- Recognize the need for trust and dependability in a team environment.

#### Level 4:

- Identify the organization of tasks and the time schedule that would help the team reach goals efficiently, creatively, and effectively.
- Select approaches that accept direction from other team members in order to complete tasks and to build and keep up good team relations.
- Identify behaviors that show appreciation for the personal and professional qualities of other team members and respect for their diversity.



- Recognize the need for commitment to quality and sensitivity to customers while pursuing the team goal.

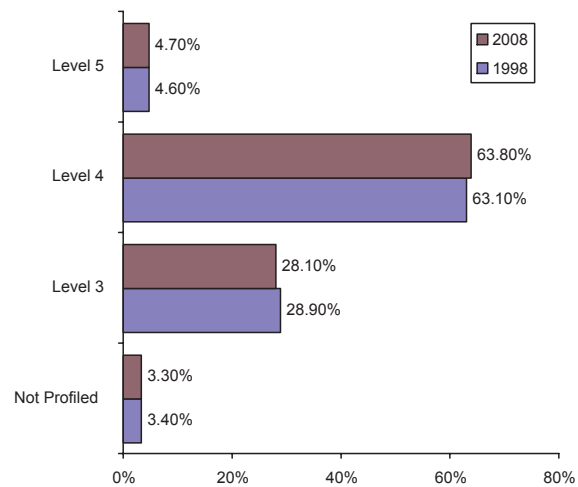
## Level 5:

- Identify courses of action that give direction to other team members.
- Determine the best use of team talents to accomplish goals.
- Choose approaches that encourage other team members to improve relationships and/or complete tasks.
- Consider and evaluate the possible effects of alternative behaviors on both team relationships and the completion of tasks.

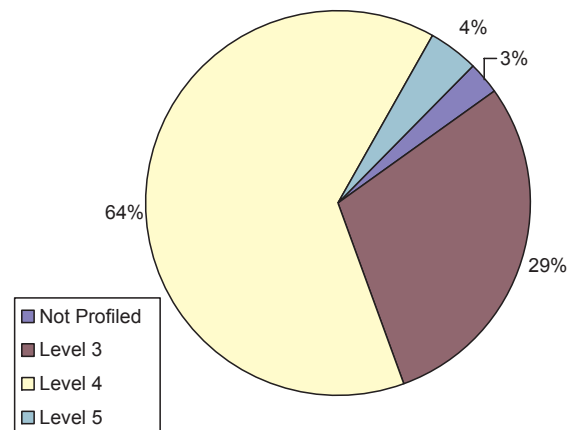
## Level 6:

- Identify the focus of team activity and select a new focus if that would help the team meet its goals more effectively.
- Select approaches that show a willingness to give and take direction, as needed, to further team goals (e.g., recognize the organization of team members' tasks that would best serve the larger goals of the team).
- Choose approaches that encourage a team to act as a unit and reach agreement when discussing specific issues.
- Identify actions that would help manage differences of opinion between team members, moving the team toward its goals while valuing and supporting individual diversity.

The following figure details the percentage of overall jobs in Region 1 – Southwest Virginia in 1998 and 2008 by required *Teamwork* skills level, as determined by the ACT occupation skills profiles. The second figure provides a similar breakdown for projected annual job openings between 1998 and 2008. These data show that the majority of jobs will require workers with Level 4 *Teamwork* skills.



*Proportion of Jobs In Region 1 – Southwest Virginia by Required Skill Level – Teamwork*



*Annual Openings in Region 1 – Southwest Virginia by Required Skill Level – Teamwork*

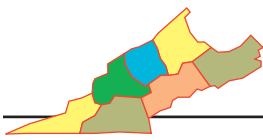
## Writing

The *Writing* portion of the *Listening and Writing* assessment measures a person's skill in writing work-related messages. ACT defines the skills levels associated with this category as follows.

### Level 1:

- Write messages in English that contain a large number of major grammatical, punctuation, spelling, and/or other mechanical errors making the messages very unclear and inconsistent with standard business English.

### Level 2:



- Write messages that are generally understandable, but contain many errors in grammar, punctuation, and/or sentence structure making these messages somewhat difficult to comprehend.

### Level 3:

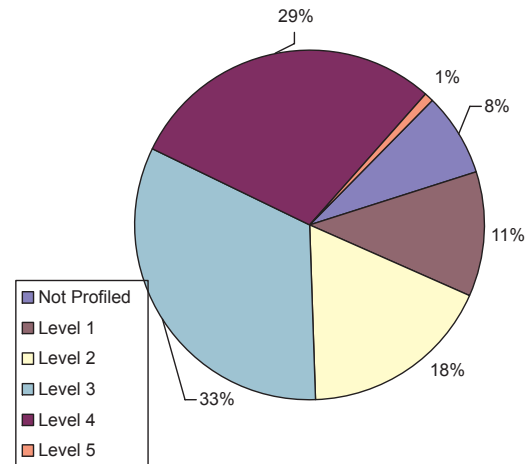
- Write messages that are clear, but may include some incomplete sentences and/or errors in grammar and punctuation.

### Level 4:

- Write messages that are clear and generally consistent with standard business English, but may contain a few minor errors in grammar and punctuation, and/or the writing style may lack clear organization and appropriate transitions.

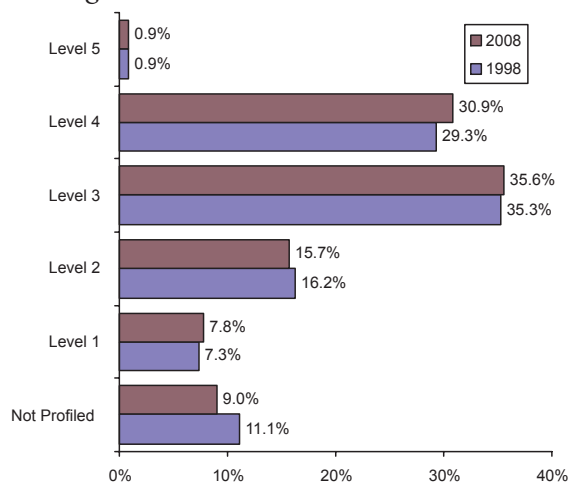
### Level 5:

- Write messages that are clear and highly consistent with standard business English.
- Use good sentence structure with a smooth, logical style and no mechanical errors.

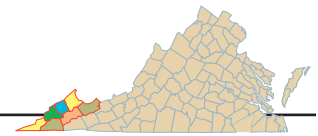


*Annual Openings in Region 1 – Southwest Virginia by Required Skill Level – Writing*

The following figure details the percentage of overall jobs in Region 1 – Southwest Virginia in 1998 and 2008 by required *Writing* skills level, as determined by the ACT occupation skills profiles. The second figure provides a similar breakdown for projected annual job openings between 1998 and 2008. These data show that the majority of jobs will require workers with Level 3 and Level 4 *Writing* skills.



*Proportion of Jobs In Region 1 – Southwest Virginia by Required Skill Level – Writing*



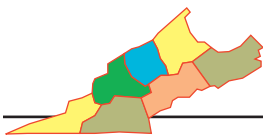
## Graduate Data

As a compliment to the prior two sections which detailed the likely demand for skilled workers in the region, this section provides data on the current supply

of graduates within WIA I. These data reflect number of graduates, by institution, and by academic program for the 2002-2003 academic year.<sup>1</sup>

Institution	Program (CIP Code)	Cert. <1 yr.	Cert. >1 <2 yr.	Assoc.	BA	1st Prof.	MA	PH.D.
Bluefield College	Communications, General (09.0101)	0	0	0	2	0	0	0
Bluefield College	English Language and Literature, General (23.0101)	0	0	0	2	0	0	0
Bluefield College	Mathematics (27.0101)	0	0	0	2	0	0	0
Bluefield College	Multi/Interdisciplinary Studies, Other (30.9999)	0	0	0	9	0	0	0
Bluefield College	Exercise Sciences/Physiology and Movement Studies (31.0505)	0	0	0	11	0	0	0
Bluefield College	Philosophy and Religion (38.9999)	0	0	0	4	0	0	0
Bluefield College	Psychology, General (42.0101)	0	0	0	11	0	0	0
Bluefield College	Psychology, Other (42.9999)	0	0	0	3	0	0	0
Bluefield College	Criminal Justice Studies (43.0104)	0	0	0	62	0	0	0
Bluefield College	History, General (45.0801)	0	0	0	1	0	0	0
Bluefield College	Social Sciences, General (45.0101)	0	0	0	1	0	0	0
Bluefield College	Music, General (50.0901)	0	0	0	4	0	0	0
Bluefield College	Business, General (52.0101)	0	0	0	22	0	0	0
Bluefield College	Human Resources Management (52.1001)	0	0	0	112	0	0	0
Mountain Empire CC	Electrical and Electronic Engin.-Related Technol./Technicians, Other (15.0399)	0	0	30	0	0	0	0
Mountain Empire CC	Environmental Control Technol./Technicians, Other (15.0599)	0	9	17	0	0	0	0

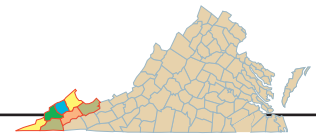
<sup>1</sup> Source: State Council of Higher Education for Virginia, Research Report C1, Completion Summary. Where data for 2002-2003 were not available, 2001-2002 data have been used.



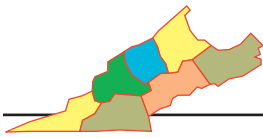
Institution	Program (CIP Code)	Cert. <1 yr.	Cert. >1 <2 yr.	Assoc.	BA	1st Prof.	MA	PH.D.
Mountain Empire CC	Mechanical Engineering-Related Technol./Technicians, Other (15.0899)	0	1	9	0	0	0	0
Mountain Empire CC	Architectural Engineering Tech./Technician (15.0101)	0	5	0	0	0	0	0
Mountain Empire CC	Liberal Art and Sciences, General Studies and Humanities, Other (24.0199)	0	0	66	0	0	0	0
Mountain Empire CC	Protective Services, Other (43.9999)	0	7	15	0	0	0	0
Mountain Empire CC	Nursing (R.N. Training) (51.1601)	0	20	45	0	0	0	0
Mountain Empire CC	Respiratory Therapy Technician (51.0908)	0	0	17	0	0	0	0
Mountain Empire CC	Emergency Medical Tech./Technician (51.0904)	0	0	2	0	0	0	0
Mountain Empire CC	Mental Health Services, Other (51.1599)	67	0	0	0	0	0	0
Mountain Empire CC	Business, General (52.0101)	0	0	14	0	0	0	0
Mountain Empire CC	Administrative Assistant/Secretarial Science, General (52.0401)	0	32	45	0	0	0	0
Southwest Virginia CC	Radio and Television Broadcasting Tech./Technician (10.0104)	0	1	0	0	0	0	0
Southwest Virginia CC	Special Education, Other (13.1099)	0	6	15	0	0	0	0
Southwest Virginia CC	Electrical and Electronic Engin.-Related Technol./Technicians, Other (15.0399)	0	5	30	0	0	0	0
Southwest Virginia CC	Architectural Engineering Tech./Technician (15.0101)	0	2	0	0	0	0	0
Southwest Virginia CC	Environmental Control Technol./Technicians, Other (15.0599)	0	2	0	0	0	0	0
Southwest Virginia CC	Mechanical Engineering-Related Technol./Technicians, Other (15.0899)	0	8	5	0	0	0	0
Southwest Virginia CC	Mining Tech./Technician (15.0901)	0	1	10	0	0	0	0
Southwest Virginia CC	Liberal Art and Sciences, General Studies and Humanities, Other (24.0199)	0	0	143	0	0	0	0
Southwest Virginia CC	Protective Services, Other (43.9999)	0	11	19	0	0	0	0
Southwest Virginia CC	Graphic and Printing Equipment Operator, General (48.0201)	0	3	0	0	0	0	0

# Education Profile

# WIA I

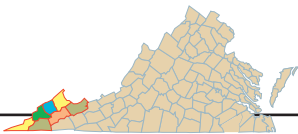


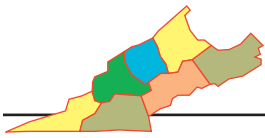
Institution	Program (CIP Code)	Cert. <1 yr.	Cert. >1 <2 yr.	Assoc.	BA	1st Prof.	MA	PH.D.
Southwest Virginia CC	Mental Health Services, Other (51.1599)	392	1	21	0	0	0	0
Southwest Virginia CC	Occupational Therapy Assistant (51.0803)	0	12	0	0	0	0	0
Southwest Virginia CC	Respiratory Therapy Technician (51.0908)	0	0	8	0	0	0	0
Southwest Virginia CC	Medical Radiologic Tech./Technician (51.0907)	0	9	13	0	0	0	0
Southwest Virginia CC	Emergency Medical Tech./Technician (51.0904)	0	0	7	0	0	0	0
Southwest Virginia CC	Nursing (R.N. Training) (51.1601)	0	0	17	0	0	0	0
Southwest Virginia CC	Business, General (52.0101)	0	4	14	0	0	0	0
Southwest Virginia CC	Management Information Systems and Business Data Processing, General (52.1201)	0	0	8	0	0	0	0
Southwest Virginia CC	Administrative Assistant/Secretarial Science, General (52.0401)	0	5	16	0	0	0	0
UVA-Wise	Computer and Information Sciences, General (11.0101)	0	0	0	13	0	0	0
UVA-Wise	English Language and Literature, General (23.0101)	0	0	0	21	0	0	0
UVA-Wise	Liberal Arts and Sciences/Liberal Studies (24.0101)	0	0	0	27	0	0	0
UVA-Wise	Mathematics (27.0101)	0	0	0	9	0	0	0
UVA-Wise	Biological and Physical Sciences (30.0101)	0	0	0	24	0	0	0
UVA-Wise	History, General (45.0801)	0	0	0	17	0	0	0
UVA-Wise	Social Sciences, General (45.0101)	0	0	0	56	0	0	0
UVA-Wise	Nursing (R.N. Training) (51.1601)	0	0	0	6	0	0	0
UVA-Wise	Business, General (52.0101)	0	0	0	75	0	0	0



### WIA I Training Providers List

Provider Name	Contact Information	List of Programs/Courses
Mountain Empire Community College	P.O. Drawer 700 Big Stone Gap VA 24219 Phone: 276-523-2400 Web: <a href="http://www.me.cc.va.us">www.me.cc.va.us</a>	College courses
Richlands Beauty Academy	2629 W. Front St., Suite A Richlands VA 24641 Phone: 540-963-2042	Cosmetology Nail Technician
Russell County Career and Technology Center	1 Vocational School Road Lebanon VA 24266 Phone: 276-889-6550 Email: <a href="mailto:cgent@russell.k12.va.us">cgent@russell.k12.va.us</a>	Licensed Practical Nursing
Southwest Virginia Community College	P O Box SVCC Richlands VA 24641 Phone: 540-964-2555 Web: <a href="http://www.sw.ccva.us">www.sw.ccva.us</a>	College level courses
TRI-County Driving Academy	P O Box 457 Rosedale VA 24280 Phone: 540-794-7660 Email: <a href="mailto:Meglothlin2@hotmail.com">Meglothlin2@hotmail.com</a> Web: <a href="http://tricountydrivingacademy.com">tricountydrivingacademy.com</a>	Heavy Equipment Operation Truck Driver Training



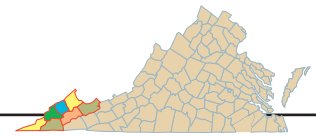


### V. Summary and Conclusion

Population trends in WIA I, as in other parts of the United States, are currently dominated by the aging of the baby-boom generation. Between 2000 and 2010 this demographic phenomena will cause a major increase in the 55 and over population within the region. Population loss within the region will further exacerbate this trend, leading to an overall “graying” of the population.

One implication of this is that younger entry-level workers will be in short supply. This should elevate the importance of workforce services in facilitating the efficient and effective use of existing labor resources by getting younger trained workers into the workforce, and retraining or upgrading the skills of older displaced workers.

Another significant trend within WIA I is increasing employment in the Service sector. It can be anticipated that employment increases within this sector – specifically, in health care and education – will drive much of the demand for trained workers between 1998 and 2008.



## Average Weekly Wage

### *Buchanan County*

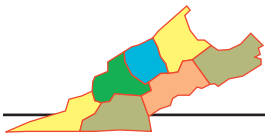
INDUSTRY SECTOR	2002 (\$)
****TOTAL****	573
AGRICULTURE	280
MINING	958
UTILITIES	D
CONSTRUCTION	514
MANUFACTURING	648
TRADE-WHOLESALE	624
TRADE-RETAIL	320
TRANSPORTATION	471
INFORMATION	577
FINANCE/INSURNC	462
REAL ESTATE	428
PROF/TECH SERV	453
MANAGMNT OF COS	D
ADMIN/WASTE SER	339
EDUCATIONAL SER	D
HEALTH CARE	596
ARTS/ENTER/REC	241
ACCOMMDATN/FOOD	228
OTHER SERVICES	395
GOVT TOTAL	455
GOVT FEDERAL	498
GOVT STATE	604
GOVT LOCAL	400
UNCLASSIFIED	0

### *Dickenson County*

INDUSTRY SECTOR	2002 (\$)
****TOTAL****	456
AGRICULTURE	301
MINING	763
UTILITIES	708
CONSTRUCTION	548
MANUFACTURING	188
TRADE-WHOLESALE	418
TRADE-RETAIL	301
TRANSPORTATION	515
INFORMATION	D
FINANCE/INSURNC	511
REAL ESTATE	D
PROF/TECH SERV	412
MANAGMNT OF COS	D
ADMIN/WASTE SER	D
EDUCATIONAL SER	D
HEALTH CARE	428
ARTS/ENTER/REC	D
ACCOMMDATN/FOOD	156
OTHER SERVICES	582
GOVT TOTAL	438
GOVT FEDERAL	618
GOVT STATE	697
GOVT LOCAL	415
UNCLASSIFIED	0

"D" indicates nondisclosed data.

Source: Covered Employment and Wage data, Annualized 2002.



### Average Weekly Wage

#### Lee County

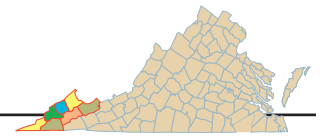
INDUSTRY SECTOR	2002 (\$)
****TOTAL****	466
AGRICULTURE	369
MINING	772
UTILITIES	D
CONSTRUCTION	424
MANUFACTURING	367
TRADE-WHOLESALE	338
TRADE-RETAIL	293
TRANSPORTATION	508
INFORMATION	673
FINANCE/INSURNC	532
REAL ESTATE	245
PROF/TECH SERV	406
MANAGMNT OF COS	648
ADMIN/WASTE SER	442
EDUCATIONAL SER	D
HEALTH CARE	479
ARTS/ENTER/REC	290
ACCOMMDATN/FOOD	152
OTHER SERVICES	285
GOVT TOTAL	542
GOVT FEDERAL	803
GOVT STATE	608
GOVT LOCAL	425
UNCLASSIFIED	0

#### Russell County

INDUSTRY SECTOR	2002 (\$)
****TOTAL****	527
AGRICULTURE	310
MINING	783
UTILITIES	D
CONSTRUCTION	467
MANUFACTURING	514
TRADE-WHOLESALE	622
TRADE-RETAIL	350
TRANSPORTATION	423
INFORMATION	547
FINANCE/INSURNC	513
REAL ESTATE	360
PROF/TECH SERV	522
MANAGMNT OF COS	D
ADMIN/WASTE SER	366
EDUCATIONAL SER	D
HEALTH CARE	623
ARTS/ENTER/REC	D
ACCOMMDATN/FOOD	183
OTHER SERVICES	336
GOVT TOTAL	550
GOVT FEDERAL	709
GOVT STATE	618
GOVT LOCAL	495
UNCLASSIFIED	0

"D" indicates nondisclosed data.

Source: Covered Employment and Wage data, Annualized 2002.



## Average Weekly Wage

### Scott County

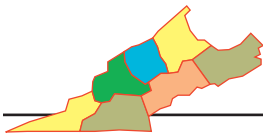
INDUSTRY SECTOR	2002 (\$)
****TOTAL****	432
AGRICULTURE	397
MINING	1,066
UTILITIES	D
CONSTRUCTION	452
MANUFACTURING	573
TRADE-WHOLESALE	540
TRADE-RETAIL	316
TRANSPORTATION	371
INFORMATION	D
FINANCE/INSURNC	466
REAL ESTATE	179
PROF/TECH SERV	350
MANAGMNT OF COS	D
ADMIN/WASTE SER	2,137
EDUCATIONAL SER	D
HEALTH CARE	370
ARTS/ENTER/REC	D
ACCOMMDATN/FOOD	172
OTHER SERVICES	380
GOVT TOTAL	505
GOVT FEDERAL	620
GOVT STATE	535
GOVT LOCAL	492
UNCLASSIFIED	0

### Tazewell County

INDUSTRY SECTOR	2002 (\$)
****TOTAL****	444
AGRICULTURE	373
MINING	803
UTILITIES	1,221
CONSTRUCTION	486
MANUFACTURING	529
TRADE-WHOLESALE	507
TRADE-RETAIL	327
TRANSPORTATION	481
INFORMATION	586
FINANCE/INSURNC	539
REAL ESTATE	342
PROF/TECH SERV	595
MANAGMNT OF COS	D
ADMIN/WASTE SER	299
EDUCATIONAL SER	D
HEALTH CARE	522
ARTS/ENTER/REC	288
ACCOMMDATN/FOOD	170
OTHER SERVICES	416
GOVT TOTAL	475
GOVT FEDERAL	730
GOVT STATE	549
GOVT LOCAL	440
UNCLASSIFIED	0

"D" indicates nondisclosed data.

Source: Covered Employment and Wage data, Annualized 2002.



### Average Weekly Wage

#### Wise County

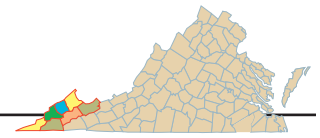
INDUSTRY SECTOR	2002 (\$)
****TOTAL****	533
AGRICULTURE	371
MINING	883
UTILITIES	D
CONSTRUCTION	397
MANUFACTURING	570
TRADE-WHOLESALE	646
TRADE-RETAIL	325
TRANSPORTATION	532
INFORMATION	620
FINANCE/INSURNC	493
REAL ESTATE	341
PROF/TECH SERV	573
MANAGMNT OF COS	1,174
ADMIN/WASTE SER	363
EDUCATIONAL SER	D
HEALTH CARE	486
ARTS/ENTER/REC	231
ACCOMMDATN/FOOD	179
OTHER SERVICES	407
GOVT TOTAL	555
GOVT FEDERAL	752
GOVT STATE	602
GOVT LOCAL	499
UNCLASSIFIED	0

#### Norton city

INDUSTRY SECTOR	2002 (\$)
****TOTAL****	543
AGRICULTURE	D
MINING	728
UTILITIES	1,158
CONSTRUCTION	469
MANUFACTURING	428
TRADE-WHOLESALE	897
TRADE-RETAIL	358
TRANSPORTATION	348
INFORMATION	D
FINANCE/INSURNC	492
REAL ESTATE	307
PROF/TECH SERV	540
MANAGMNT OF COS	D
ADMIN/WASTE SER	307
EDUCATIONAL SER	D
HEALTH CARE	706
ARTS/ENTER/REC	D
ACCOMMDATN/FOOD	186
OTHER SERVICES	388
GOVT TOTAL	599
GOVT FEDERAL	944
GOVT STATE	624
GOVT LOCAL	452
UNCLASSIFIED	0

"D" indicates nondisclosed data.

Source: Covered Employment and Wage data, Annualized 2002.



## Unemployment Rate Trends

### *Buchanan County*

Year	Rate
2002	7.9
2001	7.7
2000	8.6
1999	14.0
1998	14.3

Year	Rate
1997	14.6
1996	15.1
1995	13.5
1994	18.3
1993	14.9

### *Dickenson County*

Year	Rate
2002	14.9
2001	16.9
2000	8.6
1999	12.5
1998	16.0

Year	Rate
1997	16.8
1996	20.5
1995	19.5
1994	18.9
1993	15.2

### *Lee County*

Year	Rate
2002	5.0
2001	5.4
2000	4.9
1999	9.0
1998	8.0

Year	Rate
1997	9.4
1996	11.8
1995	11.7
1994	10.5
1993	10.9

### *Russell County*

Year	Rate
2002	5.7
2001	7.3
2000	6.1
1999	8.3
1998	9.2

Year	Rate
1997	10.5
1996	11.3
1995	11.0
1994	13.2
1993	10.6

### *Scott County*

Year	Rate
2002	5.0
2001	4.9
2000	4.0
1999	6.6
1998	7.8

Year	Rate
1997	7.0
1996	7.4
1995	9.0
1994	8.7
1993	8.0

### *Tazewell County*

Year	Rate
2002	4.7
2001	4.4
2000	5.3
1999	7.1
1998	8.6

Year	Rate
1997	9.1
1996	9.6
1995	10.3
1994	13.9
1993	12.9

### *Wise County*

Year	Rate
2002	5.8
2001	5.6
2000	5.8
1999	9.2
1998	10.3

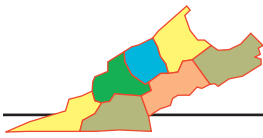
Year	Rate
1997	12.3
1996	15.8
1995	17.1
1994	12.8
1993	12.8

### *Norton city*

Year	Rate
2002	4.4
2001	5.2
2000	5.5
1999	7.6
1998	7.2

Year	Rate
1997	8.9
1996	11.0
1995	12.4
1994	9.1
1993	8.6

Source: Local Area Unemployment Statistics.



### Population by Age

#### *Buchanan County*

	1990	2000	2010	2020	2030
0-14	6,838	4,541	3,662	3,864	3,697
15-24	5,028	3,513	2,834	2,171	2,460
25-34	5,396	3,666	3,199	2,760	2,146
35-44	5,034	4,740	3,191	3,010	2,683
45-54	3,727	4,305	4,133	2,944	2,847
55+	5,310	6,213	7,383	8,452	8,267
Total	31,333	26,978	24,400	23,200	22,100

#### *Dickenson County*

	1990	2000	2010	2020	2030
0-14	3,864	2,899	2,433	2,233	2,167
15-24	2,567	2,186	1,662	1,388	1,468
25-34	2,680	1,961	1,653	1,350	1,258
35-44	2,719	2,572	1,755	1,531	1,391
45-54	1,979	2,589	2,306	1,607	1,559
55+	3,811	4,188	5,692	6,590	6,858
Total	17,620	16,395	15,500	14,700	14,700

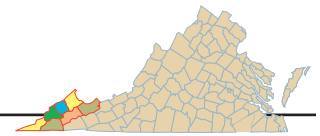
#### *Lee County*

	1990	2000	2010	2020	2030
0-14	5,116	4,437	3,666	3,757	3,654
15-24	3,415	2,820	2,594	2,110	2,302
25-34	3,572	2,975	2,985	2,756	2,240
35-44	3,513	3,503	2,586	2,741	2,663
45-54	2,750	3,522	3,368	2,564	2,725
55+	6,130	6,332	7,300	8,072	7,916
Total	24,496	23,589	22,500	22,000	21,500

#### *Russell County*

	1990	2000	2010	2020	2030
0-14	5,769	5,004	4,638	4,715	4,970
15-24	4,104	3,712	3,348	3,034	3,210
25-34	4,667	4,263	3,320	3,105	2,944
35-44	4,542	4,779	4,264	3,397	3,285
45-54	3,350	4,419	4,910	4,370	3,527
55+	6,235	7,081	9,720	12,379	13,864
Total	28,667	29,258	30,200	31,000	31,800

2010 - 2030 data are projections.  
Source: Virginia Employment Commission 8/03, U.S. Census Bureau.



## Population by Age

### *Scott County*

	1990	2000	2010	2020	2030
0-14	4,063	3,987	3,851	3,851	3,829
15-24	3,256	2,596	2,467	2,388	2,568
25-34	3,257	2,945	2,607	2,455	2,404
35-44	3,341	3,433	2,998	2,677	2,550
45-54	2,900	3,420	3,600	3,149	2,851
55+	6,387	7,022	7,876	8,880	9,297
Total	23,204	23,403	23,400	23,400	23,500

### *Tazewell County*

	1990	2000	2010	2020	2030
0-14	9,255	7,770	6,435	6,674	6,461
15-24	6,623	5,520	4,968	3,813	4,320
25-34	6,757	5,283	4,919	4,645	3,727
35-44	7,363	6,854	4,639	4,578	4,514
45-54	5,189	7,222	7,168	4,898	4,847
55+	10,773	11,949	14,471	16,992	16,731
Total	45,960	44,598	42,600	41,600	40,600

### *Wise County*

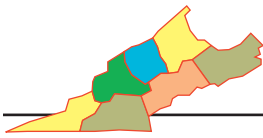
	1990	2000	2010	2020	2030
0-14	8,462	7,823	7,815	7,985	7,517
15-24	6,176	6,209	5,014	4,662	5,194
25-34	5,829	5,508	5,584	4,648	4,327
35-44	6,114	6,325	4,962	5,167	4,445
45-54	4,216	6,297	5,956	4,698	4,939
55+	8,776	10,048	11,669	12,940	12,832
Total	39,573	42,209	41,000	40,100	39,300

### *Norton city*

	1990	2000	2010	2020	2030
0-14	902	701	683	712	684
15-24	641	549	437	411	471
25-34	653	509	535	442	426
35-44	630	557	432	469	403
45-54	420	580	553	446	482
55+	1,001	1,008	1,159	1,319	1,335
Total	4,247	3,904	3,800	3,800	3,800

2010 - 2030 data are projections.

Source: Virginia Employment Commission 8/03, U.S. Census Bureau.



### Employment by Industry

#### *Buchanan County*

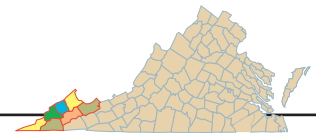
INDUSTRY SECTOR	2002
****TOTAL****	7,708
AGRICULTURE	42
MINING	1,730
UTILITIES	D
CONSTRUCTION	599
MANUFACTURING	337
TRADE-WHOLESALE	184
TRADE-RETAIL	883
TRANSPORTATION	219
INFORMATION	31
FINANCE/INSURNC	152
REAL ESTATE	35
PROF/TECH SERV	146
MANAGMNT OF COS	D
ADMIN/WASTE SER	73
EDUCATIONAL SER	D
HEALTH CARE	755
ARTS/ENTER/REC	23
ACCOMMDATN/FOOD	334
OTHER SERVICES	206
GOVT TOTAL	1,785
GOVT FEDERAL	59
GOVT STATE	393
GOVT LOCAL	1,333
UNCLASSIFIED	0

#### *Dickenson County*

INDUSTRY SECTOR	2002
****TOTAL****	3,277
AGRICULTURE	19
MINING	426
UTILITIES	46
CONSTRUCTION	168
MANUFACTURING	13
TRADE-WHOLESALE	4
TRADE-RETAIL	451
TRANSPORTATION	129
INFORMATION	D
FINANCE/INSURNC	49
REAL ESTATE	D
PROF/TECH SERV	74
MANAGMNT OF COS	D
ADMIN/WASTE SER	D
EDUCATIONAL SER	D
HEALTH CARE	407
ARTS/ENTER/REC	D
ACCOMMDATN/FOOD	168
OTHER SERVICES	74
GOVT TOTAL	955
GOVT FEDERAL	44
GOVT STATE	44
GOVT LOCAL	867
UNCLASSIFIED	0

"D" indicates nondisclosed data.

Source: Covered Employment and Wage data, Annualized 2002.



## Employment by Industry

### *Lee County*

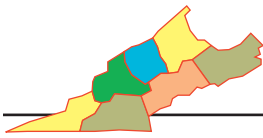
INDUSTRY SECTOR	2002
****TOTAL****	5,386
AGRICULTURE	42
MINING	342
UTILITIES	D
CONSTRUCTION	404
MANUFACTURING	536
TRADE-WHOLESALE	99
TRADE-RETAIL	598
TRANSPORTATION	108
INFORMATION	48
FINANCE/INSURNC	121
REAL ESTATE	27
PROF/TECH SERV	77
MANAGMNT OF COS	86
ADMIN/WASTE SER	84
EDUCATIONAL SER	D
HEALTH CARE	704
ARTS/ENTER/REC	13
ACCOMMDATN/FOOD	236
OTHER SERVICES	96
GOVT TOTAL	1,739
GOVT FEDERAL	440
GOVT STATE	200
GOVT LOCAL	1,099
UNCLASSIFIED	0

### *Russell County*

INDUSTRY SECTOR	2002
****TOTAL****	8,100
AGRICULTURE	55
MINING	336
UTILITIES	D
CONSTRUCTION	577
MANUFACTURING	1,739
TRADE-WHOLESALE	90
TRADE-RETAIL	1,044
TRANSPORTATION	160
INFORMATION	93
FINANCE/INSURNC	234
REAL ESTATE	42
PROF/TECH SERV	144
MANAGMNT OF COS	D
ADMIN/WASTE SER	185
EDUCATIONAL SER	D
HEALTH CARE	946
ARTS/ENTER/REC	D
ACCOMMDATN/FOOD	281
OTHER SERVICES	142
GOVT TOTAL	1,711
GOVT FEDERAL	73
GOVT STATE	637
GOVT LOCAL	1,001
UNCLASSIFIED	0

"D" indicates nondisclosed data.

Source: Covered Employment and Wage data, Annualized 2002.



### Employment by Industry

#### Scott County

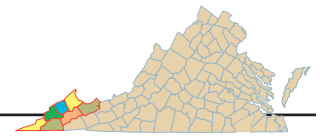
INDUSTRY SECTOR	2002
****TOTAL****	4,295
AGRICULTURE	66
MINING	25
UTILITIES	D
CONSTRUCTION	115
MANUFACTURING	557
TRADE-WHOLESALE	125
TRADE-RETAIL	800
TRANSPORTATION	104
INFORMATION	D
FINANCE/INSURNC	80
REAL ESTATE	37
PROF/TECH SERV	58
MANAGMNT OF COS	D
ADMIN/WASTE SER	24
EDUCATIONAL SER	D
HEALTH CARE	623
ARTS/ENTER/REC	D
ACCOMMDATN/FOOD	358
OTHER SERVICES	136
GOVT TOTAL	1,068
GOVT FEDERAL	74
GOVT STATE	78
GOVT LOCAL	916
UNCLASSIFIED	0

#### Tazewell County

INDUSTRY SECTOR	2002
****TOTAL****	16,567
AGRICULTURE	37
MINING	487
UTILITIES	49
CONSTRUCTION	615
MANUFACTURING	1,663
TRADE-WHOLESALE	727
TRADE-RETAIL	3,177
TRANSPORTATION	409
INFORMATION	156
FINANCE/INSURNC	447
REAL ESTATE	265
PROF/TECH SERV	528
MANAGMNT OF COS	D
ADMIN/WASTE SER	256
EDUCATIONAL SER	D
HEALTH CARE	2,148
ARTS/ENTER/REC	117
ACCOMMDATN/FOOD	1,269
OTHER SERVICES	608
GOVT TOTAL	3,154
GOVT FEDERAL	112
GOVT STATE	716
GOVT LOCAL	2,327
UNCLASSIFIED	0

"D" indicates nondisclosed data.

Source: Covered Employment and Wage data, Annualized 2002.



## Employment by Industry

### Wise County

INDUSTRY SECTOR	2002
****TOTAL****	13,394
AGRICULTURE	36
MINING	2,240
UTILITIES	D
CONSTRUCTION	440
MANUFACTURING	382
TRADE-WHOLESALE	381
TRADE-RETAIL	1,896
TRANSPORTATION	513
INFORMATION	208
FINANCE/INSURNC	271
REAL ESTATE	82
PROF/TECH SERV	433
MANAGMNT OF COS	89
ADMIN/WASTE SER	309
EDUCATIONAL SER	D
HEALTH CARE	1,408
ARTS/ENTER/REC	69
ACCOMMDATN/FOOD	973
OTHER SERVICES	260
GOVT TOTAL	3,400
GOVT FEDERAL	169
GOVT STATE	1,411
GOVT LOCAL	1,821
UNCLASSIFIED	0

### Norton city

INDUSTRY SECTOR	2002
****TOTAL****	3,932
AGRICULTURE	D
MINING	152
UTILITIES	30
CONSTRUCTION	97
MANUFACTURING	127
TRADE-WHOLESALE	141
TRADE-RETAIL	816
TRANSPORTATION	19
INFORMATION	D
FINANCE/INSURNC	82
REAL ESTATE	23
PROF/TECH SERV	184
MANAGMNT OF COS	D
ADMIN/WASTE SER	23
EDUCATIONAL SER	D
HEALTH CARE	1,104
ARTS/ENTER/REC	D
ACCOMMDATN/FOOD	340
OTHER SERVICES	81
GOVT TOTAL	442
GOVT FEDERAL	112
GOVT STATE	57
GOVT LOCAL	273
UNCLASSIFIED	0

"D" indicates nondisclosed data.

Source: Covered Employment and Wage data, Annualized 2002.